

The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

The Story of the World Today for the Men and Women of Tomorrow

Number 9

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EDITED BY ARTHUR MEE

Every Friday 1d.

THE TEN COMMANDMENTS OF PARIS

DRAMATIC SCENE IN THE PEACE ROOM

THE FATEFUL MOMENT

How the Ambassador Left the
Germans

AND HOW THEY MET AGAIN

One of the most dramatic scenes from history was staged when the German delegates arrived to receive the Terms of Peace drawn up by the Allies.

At the head of the Germans came Count von Brockdorff-Rantzau, with the credentials of his colleagues wrapped in a red cover. Confronting the count, who could not conceal his deep emotion, was M. Jules Cambon, the Master of the Ceremonies for the Allies.

"Monsieur le Comte," said the dignified Frenchman, "as President of the Verification Committee appointed by the Peace Conference, I have been instructed to convoke you in order to receive and examine your credentials."

Who is He?

The German leader could only find voice to utter the mere names of his colleagues. Then the members of the Allied Committee were introduced, and the credentials were exchanged.

Why is it that we describe this simple meeting as dramatic? Who was this courteous Frenchman who stood before the voice-broken German count to represent the world that had broken the war power of Germany and shattered kaisers into dust?

He was the French Ambassador at Berlin in 1914. He it was who did everything that could be honourably done to avoid the war. He it was who spoke with such plainness to the German War Minister when he asked him "Do you want war?" that the German replied it was only as man talking to man, and not as an Ambassador talking to a Minister, that he could allow such plain speech.

The Pistol at His Head

He it was who, when he left Germany after war had been declared, left as a criminal might have left, with the pistol of a German soldier pointed at his head, the soldier's finger on the trigger, for half an hour in the railway carriage, where ladies were so treated too; who was kept 24 hours without food; and who, when he reached the frontier of Denmark, was not allowed to cross it till he had paid £200 in gold as the cost of the German train that took him.

This was the man, on whom these mean indignities had been practised by his German hosts, who now met once more the representatives of that bullying land and greeted them with graceful dignity as they came, broken and abashed, to accept a humbling Peace in place of the Peace they had so rudely broken.

Well may we be proud of the courtesy of this man of France to our fallen enemies; well may we hope that the spirit he stands for, and the example he sets, will leave its mark on those who come from beyond the Rhine.

Moujik of the Troubled Empire



The peasant of Russia, the Moujik, as we call him, has no ill-will against the world, and desires nothing more than to be left in peace

PEACE IN THE WORKING WORLD

A Better Understanding

The working world, which a few weeks ago was greatly disturbed by the fear of strikes, has become more peaceable, and a kinder spirit exists between employers and workmen.

The National Alliance of Employers and Employed has come to a friendly understanding. The employers have accepted the proposals made at the joint conference of employers and workmen recently held in London. They agree, too, that the workers shall be consulted on the way business is carried on; and the workers agree, on their part, to help in the extension of business. They have arranged that all regular workers shall have an annual holiday without loss of wages.

All these friendly understandings point happily to a revival of business with advantage to both groups, who are much more inclined to co-operate together instead of taking sides in a suspicious way.

EVERYONE'S MILLIONAIRE Profits That Benefit Us All

The Post Office profits last year amounted to nearly seven million pounds. The telephone gave more than one-third of a million pounds profit, but telegraphs lost over half-a-million.

In the last five years the Post Office profits have increased by over two millions a year. This is the one great business which the country manages for itself. As it manages it so well and makes it pay, many people believe it could manage other businesses, such as the railways and mines, with equal success and much greater gain.

A WISE LASSIE

Little Gladys Belfield, of Runcorn, aged six, is a very wise child. One of her school fell into a canal. Had Gladys tried to save her by getting into the water, both might have been drowned; but she lay on the bank and held her friend's head above water till a soldier came. Nobody with her strength could have acted more wisely.

EDITH CAVELL HOME

Sleeping in Our English Earth

THE SUDDEN GLORY OF AN OLD, OLD STORY

Edith Cavell is back again in the land for which she lived and died. She sleeps in our English earth, after lying two years in the stricken fields of Belgium; and in Westminster Abbey and Norwich Cathedral her memory has been enshrined.

Who was Edith Cavell? Why has her body been taken from its grave in Belgium and brought back home? Why have two great cathedrals held solemn services in her memory?

She came with a sudden glory into the old, old story of England. Only her few friends knew her name when the war began; today it is known to the ends of the earth, and will live with Florence Nightingale's. In the years to come, when you boys and girls have children of your own, you will tell them the story of Edith Cavell.

The Nurse's Crime

You will tell them how this brave woman gave up her life to nurse the sick, and how, being in Belgium in the Great War, it mattered nothing to her whether she was nursing friend or foe. She was the friend of all who needed her, and even Germans she nursed back to health.

But one thing this brave woman could not bear: she could not bear to see the German Army forcing Belgian men to work against their country. She could not bear to see these men enslaved by German conquerors. And so she sheltered them, and helped them to escape to Holland, where they could be free; or to France, where they could fight for freedom.

Shot

And then one day the Germans found her out, found her guilty of the terrible crime of being kind to suffering people, and for this they sentenced her not to a little imprisonment, not even to penal servitude, but to death. The horrified ambassadors of other nations appealed in vain against this savage deed, and one night in the dark they took this woman to a garden, and an officer took a pistol from his belt and shot her dead. So low was Germany.

As for Edith Cavell, she died like a daughter of England. Too proud to feel scorn of her assassins, too noble to hate them, she left this message to ring for ever down the corridors of time:

Standing as I do in view of God and Eternity, I realise that patriotism is not enough. I must have no hatred or bitterness towards anyone.

With this noble farewell to the world, Edith Cavell reached the gate of heaven.

Greatest Event in History

1300 MILLION PEOPLE AGAINST WAR

The League of Nations and What it has Agreed to do

TEN FOUNDATIONS OF THE PEACE OF THE WORLD

The League of Nations is established. It is the greatest thing that has happened since you were born; it is perhaps the greatest thing that has ever happened, for it means that over a thousand million people—over 1300 millions altogether—have agreed not to fight each other. It means that seven out of every eight people in the world are banded in a League of Peace.

It is not to be supposed that all the difficulties have been overcome. It is not to be supposed that a machine so tremendous in its purpose, so momentous in its consequence, so stupendous in the area that it covers, can be perfect on the day that it is made. It took fifty years to make the railway; it took centuries to stop the buying and selling of human beings; it took a generation to save little children from coal mines. The world moves slowly.

But the world does move, and the founding of the League of Nations is now actually established as the international machine for keeping peace and preventing war. If it works, as all the best people in the world devoutly hope it will, it will be the greatest human achievement since the world began.

We may give the honour for it to President Wilson, who sowed the seed of the League in the midst of the Great War, and compelled the chief men of all nations to do honour to this great idea. His name will live in history as the first World Statesman America has produced, and he will be remem-

bered for all time as the greatest benefactor of mankind.

Let us look quickly at the machinery of the League. Everything depends on its smooth working.

The seat of the League is at Geneva. It will rule by an Assembly and a Council. The first Secretary is Sir James Eric Drummond, who leaves the British Foreign Office to take up his post.

The Assembly consists of representatives of all nations in the League, and may deal with anything affecting peace.

The Council consists of America, France, Italy, Japan, and the British Commonwealth, with four other members chosen by the Assembly.

The first meeting of both bodies will be summoned by the American President. They must meet once a year.

It is very striking, and one of the most admirable provisions of the constitution, that all positions under the League, without any exception, are open to men and women, and all officials are to have the privileges of diplomatists.

There is also provision for certain permanent commissions, which will always be sitting to safeguard the operations of the League and to advise on points of profound importance.

That is the sort of machinery that has been set up. It will make Geneva a World Capital; and upon the members of the Council and Assembly meeting there will rest the most solemn responsibility that has ever fallen on men's shoulders. They will keep watch and ward for all mankind.

And now, what is it that the League of Nations is agreed upon? We may put it in the form of ten new commandments laid down for the world in the name of 1300 million people.

THE THINGS CIVILISATION HAS AGREED UPON

1. Armaments of all nations shall be reduced to the lowest point of national safety and the common fulfilment of international law. No Government shall exceed the limits laid down by the League.
2. The League will protect the territories and independence of all countries.
3. Any dispute shall be submitted to the Council, which will issue its award within six months, and no country shall resort to war within three months of this award; so that there shall be at least three, and perhaps nine, months between a quarrel and the possibility of war.
4. All countries shall carry out in good faith the awards of the Council, and no country shall go to war against any country complying with the Council's award.
5. There shall be a permanent Court of International Justice.
6. There shall be no secret treaties or war preparations. There shall be full publicity in all matters, and in any dispute the Council may publish the facts so that all the world may know them. No treaty between any country shall be binding till it has been published.
7. Should any member break his covenant, he shall be deemed to be at war with all other members, who will sever trade relations, prohibit intercourse with any other country, and decide what armed forces shall be used to protect its covenant.
8. It shall be a sacred trust of civilisation to care for backward peoples not yet able to stand by themselves under the strenuous conditions of the modern world, and the care of such peoples shall be entrusted to nations best able to undertake it in the name of the League. They shall be called the Mandatary nations, and in selecting them the wishes of the backward peoples must be a chief consideration.
9. There shall be no interference with domestic questions. Neither shall the League interfere with any understandings for maintaining peace, such as the Monroe Doctrine in America.
10. Every effort shall be made by the League to secure and maintain fair and humane conditions of labour in all countries, just treatment of natives, and the prevention of disease.

Those are the main provisions laid down in the Covenant of the League of Nations, and, as far as it has yet been possible to do so, the machinery has been provided for carrying them out. It is hoped that all international organisations now existing will be brought within the League. The following countries have joined

the League already, and the door is left open for any other country to join:

America	France	Nicaragua
Belgium	Greece	Panama
Bolivia	Guatemala	Peru
Brazil	Haiti	Poland
British Empire	Hedjaz	Portugal
China	Honduras	Rumania
Cuba	Italy	Serbia
Czecho-Slavs	Japan	Siam
Ecuador	Liberia	Uruguay

INVENTIONS & IDEAS

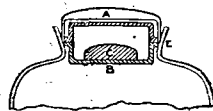
Things Just Patented

By our Patent Office Explorer

These inventions, being only just patented, are not yet available for the public, and the Editor has no further information concerning them.

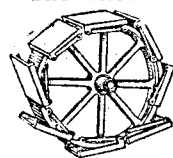
A KETTLE THAT RINGS A BELL

This kettle has two lids, A and B, one resting on the other, and in between is a third lid, C, perforated so that directly the kettle begins to boil, there is a loud and continuous whistle. An alternate plan is to let the vibration of the third lid, C, ring a bell in the handle. A rim, E, round the mouth prevents the water boiling over.



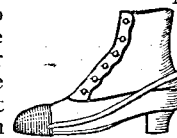
A WHEEL THAT LAYS ITS OWN TRACK

The wheel is fitted with lateral flat treads that are hinged, and lie flat on the ground as the wheel moves forward. This wheel is particularly useful for heavy traffic on soft or greasy roads.



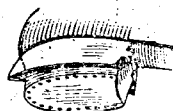
A TOE PROTECTOR FOR BOOTS

This is a detachable leather toecap to fit over a boot to protect the toe of the boot when the wearer is kneeling, as in the scrubbing of floors. It is kept in position by an elastic band round the heel.



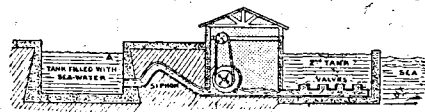
A MUDGUARD FOR BOOTS

This is an attachment to be fixed over the heels of a boot, to which it is fastened, and catches the mud splashed up which would otherwise go on the heel. The guard can be removed for cleaning.



WORKING MACHINERY BY THE TIDES

The sea is let into a tank, A, when it goes through a siphon and turns a water-wheel which works machinery.



It then escapes either back to the sea or through valves to be used again.

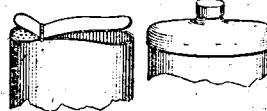
A TEAPOT STIRRER.

An attachment to the lid of the teapot, which enables the tea to be stirred by simply rotating the lid.



A POCKET SUGAR FLASK AND SIFTER

This is a flat sugar-box in the shape of a flask, with the lid in two sections, one large to enable sugar to be removed in the usual way, and the other small, covering perforations, which enable the box to be used as a sifter for puddings.



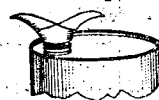
A NEW SORT OF BRUSH

One of the disadvantages of ordinary hand-brushes is that, after being in use some time, the tip gets worn out, and all the bristles disappear. By having a hole at each end with a screw thread, this brush can be used at both ends, the handle being detached when one end is worn out, and inserted at the other.



A MOVABLE SPOUT FOR AN OIL-CAN

This spout enables the oil to be poured out of the can without spilling, and it can, when out of use, be turned round so as not to project over the can.



£100 FOR SIXPENCE

The Bolshevik and His Money

It is becoming easy to buy £100 for 6d. in Germany. The only trouble is that it is Russian money.

In January of this year Germans were buying Russian banknotes at the rate of 2000 roubles for 500 marks. At nominal value this represented about £200 for £25. Now roubles to the nominal value of £100 have been sold for a German sixpence.

The reason is that the Bolsheviks in Russia have created money by the simple process of printing as many old and new banknotes as foreign exchanges would buy. The Russian peasants will no longer take the notes of their own country in payment for anything, so that Bolshevik money can now be purchased at the rate of £100 for 6d., and is likely to fall to the price of waste-paper.

NEWSPAPER NOTES AND QUERIES

What are Mandatary Powers? Mandatary powers are such powers as are conferred by the League of Nations on a certain country to manage the affairs of some part of the world that has been placed by the Peace Conference under the League of Nations.

What is Imperial Preference? Imperial preference is a system of taxation which gives our Colonies and other parts of the British Commonwealth an advantage over nations outside the Empire in selling their products to us. The advantage comes from smaller duties being levied on certain goods produced within the Empire.

What is a Covenant? A covenant is a solemn agreement between groups of individuals or whole countries to keep faith with each other while pursuing some object agreed upon.

What are Allies? Allies are friendly nations who have bound themselves by promises to act together if attacked by enemies. These Alliances have been made usually in Treaties, sometimes kept secret. Britain, France, Belgium and Italy were Allies in the war; but the American law does not allow the United States to enter into alliances, and America therefore was not an Ally. She fought independently for certain causes she believed in. That is why the Allies, after America came in, were often called the Associated Powers.

A MECHANICAL WATCH-DOG

A very clever method of finding thieves is now in use in America. It is called the detectaphone. Very small in size, it can be concealed anywhere in a room where thieves may be likely to appear.

One part of it is a telephone connected by a wire with the police headquarters or the office of the guardians of a building. This picks up any sound made by the intruders. The other part is a microphone which immensely magnifies the sound, so that the least noise becomes a loud warning, which also tells exactly where the thieves are prowling. Satisfactory results are said to follow the use of this mechanical watch-dog.

WHAT ALSACE-LORRAINE WILL COST GERMANY

Few people realise what the loss of Alsace-Lorraine will mean to Germany. Not only will she lose the population and the territory, but she will lose her chief source of supply for iron ore.

Germany's iron and steel industry has gone ahead by leaps and bounds since 1871, and this has been due entirely to her remarkable development of the Alsatian ore deposits which formerly belonged to France. In 1913 they yielded 2,300,000 tons of iron.

Before the war, also, Alsace yielded nearly a half of the 1,200,000 tons of crude oil produced in Germany, besides enormous quantities of potash. In this field alone the loss can never be replaced.

THE AMAZING KINEMA

£2,000,000,000 AT THE BANK

New Picture Stories

By Our Kinematograph Correspondent

The marvellous conquest of the kinema is brought home by the figures just published showing the great strides made by the industry in various countries. A few years ago the kinematograph was a child's toy; to-day it has commanded the confidence of the financiers of the world to such an extent that the money invested in it is said to approach nearly two thousand million pounds. What other new invention has such a banking account?

The following astonishing statistics, showing the estimated totals of the sums invested in the kinematograph industry in various countries, are given:

America	..	£1,120,000,000
Germany	..	£320,000,000
England	..	£240,000,000
Italy	..	£72,000,000
France	..	£44,000,000

If we add only small sums for other countries the total is easily up to £2,000,000,000.

SIR HARRY LAUDER

It is said that Harry Lauder—Sir Harry Lauder now!—the music-hall comedian, is retiring from the stage and becoming a film actor.

RIDER HAGGARD

A film version of Sir H. Rider Haggard's well-known novel "King Solomon's Mines" has been produced in South Africa.

CHILDREN'S KINEMAS

Lady Davies, wife of the M.P. for Crewe, speaking recently at a branch meeting of the Women's Liberal Association, suggested that special children's kinemas should be opened.

Films Coming On

The Editor urges his readers not to patronise picture palaces where vulgar plays are exhibited

A TALE AMONG THE TREES

One of the greatest charms of the picture play is the variety of its many-sided interests. A good play often contains much which entertains and even educates, besides its plot and acting. Thus, in "The Source," an exciting new drama, we are given a vivid and complete insight into the great American timber industry. For an hour or so we live in the midst of a vast forest and witness every detail of the work of felling gigantic trees and transporting them in bundles down the river to the saw-yards, and all the time we also are following a romantic human tale.

DOG SAVES A PONY

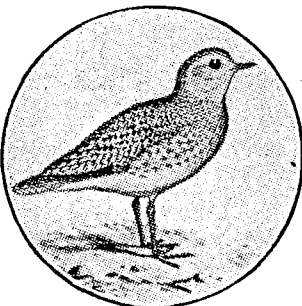
One of the cleverest dogs yet seen in a film play is Gimp, who appears with Billie Rhodes in a pretty new story of circus life, entitled, "Hoop-la." Gimp sticks faithfully to his mistress while she is a happy little circus queen, as well as later when, discovering that she is really an heiress, she leaves the merry ring life that she loves to try and become a "young lady." Finally, Gimp distinguishes himself during a circus fire by running to the animal tent, untying the halter of a pony, and leading it to safety.

TO LET

Thanks to his ingenuity for devising mechanical "ghost illusions," the caretaker of a vacant house, a retired conjurer, has lived rent free for years; and when Mr. and Mrs. Briggs joyfully discover the place, after a long and desperate house hunt, the knowing magician prepares to treat them to a dose of the same uncanny tricks with which he has frightened away every other likely tenant. After a night of hair-raising events, the young couple expose the caretaker's little game, only to learn that the house has been sold to a stranger while they were all arguing. "To Let" is the title of this merry skit on the house famine. L. Y.

BIRDS WITH A GOOD CHARACTER

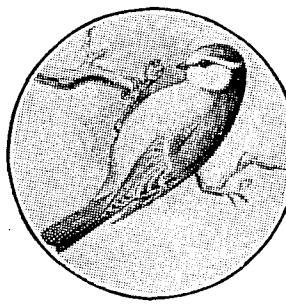
Presentation of Eighteen Certificates of Good Conduct by the Government



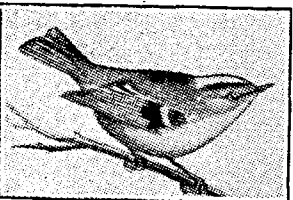
Golden Plover



Long-eared Owl



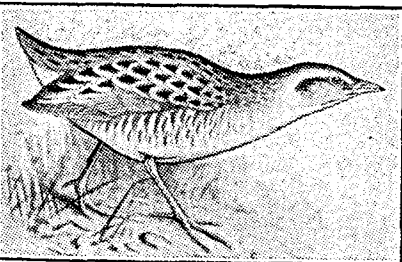
Blue Titmouse



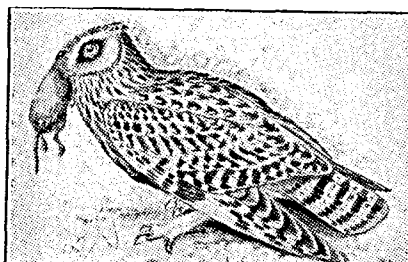
Golden-crested Wren



British Coal Titmouse



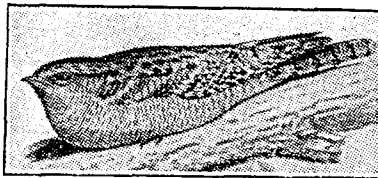
Corn-Crake



Short-eared Owl



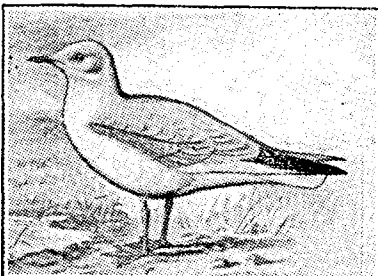
Greater Spotted Woodpecker



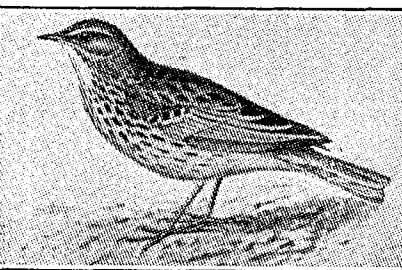
Nightjar, or Goatsucker



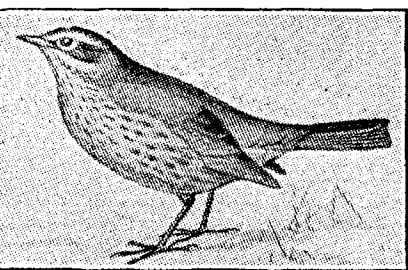
Kestrel



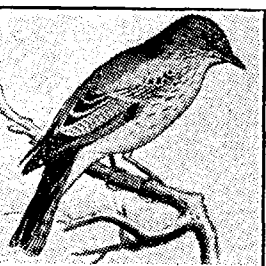
Black-headed Gull



Meadow Pipit



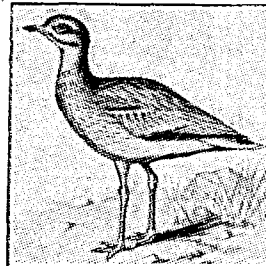
Redwing



Spotted Flycatcher



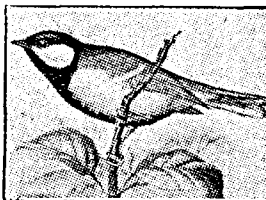
Lesser Spotted Woodpecker



Stone Curlew



Sand Martin



Great Titmouse

All these birds have been given a certificate of good conduct by the Government, the Natural History Museum having officially declared them to be beneficial to agriculture

PLAYING CRICKET

BY C. B. FRY

Put Your Bat Where the Ball is

Well, either you believe what I told you last time about the right and easy way of looking at batting and about the absolute necessity of looking at the ball, or you do not. If you do, and act on your belief, you will certainly get on; if you do not, you may get on somehow, or you may fail.

The next thing you should do is this. Get somebody who is a decent bowler to bowl a ball exactly as he would in a match; it must be a "good length" ball. He will know what that is. You stand about 20 yards away, opposite to a point midway between wicket and wicket, so that you can see the whole path of the ball sideways—not end-on or half-sideways, but sideways. Good. You should have a writing block in your hand and a pencil.

Make the bowler bowl several "good length" balls. Draw a line representing as nearly as you can the path of the ball. It will be a curved line, a broken curve, from his hand to where the ball pitches, and from the ground on past the wicket.

Make a Note of the Pitch

Then go home and get some squared paper—all boys nowadays can get a piece of squared paper from their schools—and, having drawn a thick line to represent the ground, mark off either 22 inches or 22 half-inches for the length of the pitch, and draw the two wickets seen sideways. Then, as well as you can, draw in the path of the ball from your rough sketch. Ask someone to help you to get the whole thing as true as possible to scale.

Now consider the matter thus. If you were batting you would be stationed with your feet together about a yard from your wicket. Mark this spot. Nothing you can do to the ball—until you have hit it—will alter its path: that happens quite apart from your control.

Question: Where can you put in a small cross on the curved path of the ball to mark a spot which you would choose as the best spot for the ball to be, in its path, in order for you to hit it hard all along the ground?

How the Bat Should Swing

You must consider the foot next your wicket to be a fixture, and must consider exactly how far you can conveniently reach with the swing of your bat. You must consider, also, that your bat should swing, as it were, in a narrow space between two walls—that is to say, in a narrow upright space. You can move the other foot.

Well, find the spot to put the cross. Ask someone who knows about cricket, if you can find him, to consider the matter with you.

I strongly advise you to work this matter out for yourself, with friends or without. My reason is that if you do so you will see with your mind the point to aim at in what are called "forward strokes"—by which I mean, of course, the strokes where you move your front foot away towards the ball as it comes in order to reach it conveniently. The problem is to get your bat to that spot exactly when the ball is there, and to be looking at the ball as nearly as possible right up to the time your bat makes contact.

You will learn more by considering the matter in this way, with your sketch, than by reading dozens of books or listening to a world of advice. What is more, you will unlearn a lot of nonsense written in books and spoken by advisers. You will see certain facts. C. B. F.

TERRIBLE SPECK OF LIFE

How it was Found Creeping in the Alps

RICHEST MAN ON EARTH TRACKS IT TO ITS DOOM

One of the great battles in man's war against disease is the Hookworm Campaign, carried on by the American Rockefeller Foundation. It is an endeavour to be proud of.

Some years ago Mr. Rockefeller, the richest man in the world, set aside a large sum of money to "promote the well-being of mankind throughout the world"; and the trustees of the fund have sought to fulfil this end by promoting research, hospitals, and sanitation. They have been quietly but powerfully fighting malaria, yellow fever, hookworm, and some other diseases. We wish to refer to hookworm.

This is a small but dangerous thread-worm, about the thickness of a pin, and half as long, which first came into prominence in connection with the making of the St. Gothard tunnel through the Alps. During the last few years of the work about 95 per cent. of the workmen were infected.

What the Worm Does

The very young worms live on or near the surface of the soil, and are too small to be seen with the naked eye. They enter the bodies of miners, tunnel-makers, quarrymen, labourers, and others by boring through the skin of the bare feet and hands. After wandering through various parts of the body, they take up their abode in the food-canal, where they attach themselves, and grow to maturity. The females produce immense numbers of eggs, which are passed out from the body, and hatch in the soil. So the cycle is completed. Thousands of hookworms may live inside one person, and as they nourish themselves by sucking the blood of their host they produce serious bloodlessness and weakness. They also lessen the power of resistance to other diseases.

A Third of Mankind Afflicted

Now, the hookworms are not confined to tunnels and mines, but are widespread all over the world in tropical and sub-tropical countries, in the zone between parallels 36° north and 30° south, where more than half the population of the globe lives. They are distressing, depressing, disabling handicaps; and in many regions more than 90 per cent. of the inhabitants are infected. The hookworms sap the vitality of perhaps a third of mankind; and it is hardly possible to think of any greater bodily benefit to the human race than the conquest of these unwelcome guests.

The campaign which the Rockefeller Foundation has been waging all round the world has three main tactics—to give the patients medicine for expelling the parasite, to get people to understand its life-history, and to promote simple sanitary measures which keep the soil from being fouled by teeming thousands of squirming worms. The results have been highly successful, and victory is only a question of time.

THE DIVER'S NEW TOOL

Divers at work on saving sunken ships can tear open their steel plates with the invention of a French engineer.

Blow-pipe flames of oxy-acetylene gas, with such intense heat that they will melt the hardest steel, are commonly used in industrial work; and most of us have seen them in cinematograph pictures, used by burglars cutting open massive safes. The new diver's blow-pipe is fitted in a small diving bell, the water from which is driven out by compressed air. A ship's plates can be cut with it thirty feet below the water.

LIVING LAMPS

Wonder of the Firefly Squid

SOMETHING NEW FROM JAPAN

In Toyama Bay, in the Japanese Sea, there are often large numbers of a small luminescent cuttlefish, to which its discoverer, Professor Watase, gave the vivid name of firefly squid.

As cuttlefishes go, it is a small creature, the main part of its body about three inches long, but it is very beautiful, for it bears a number of luminous organs. The largest of these has the form of three shining globules at the end of the fourth tentacle; then there are five little lights below each eye, and 600 bright spots dotted over the lower surface of the body.

The fishermen say that it is so delicate that it lives only a very short time if taken from the sea and put in a pail of sea-water, but this is mainly because the water from the surface is different from that of the deep layers in which the firefly squid usually lives.

Cells that Make the Light

The luminescent squid's light is bluish-white. That on the tentacle is periodic, like that of the firefly, that of the tiny spots is continuous. Within a short time after death the scattered bright spots, seen in daylight, continue to show a blue glitter. This is not seen in the dark, and it is probably of the nature of a reflection, as is the case in a cat's eyes in a dimly lighted room.

The cause of the light seems to be the rapid combustion of a substance produced in the living cells of the luminous organs. Experiments show that oxygen is indispensable for the luminescence of the firefly squid, as indispensable as it is for the burning of a candle.

The light disappears when oxygen is absent, and comes back when oxygen is restored. Narcotics like ether, alcohol, and chloroform excite more light for a moment or two, and then put it out for the time being. When the narcotics are removed the light reappears. What the use of the living lights may be is not yet clear.

THE WAR WILDERNESS

Terrible Picture of France

The war has left a wilderness in the heart of beautiful France. Ruin and destruction have made unproductive seven million acres of land.

A quarter of a million acres of this area have been so shattered by shells and bombs and gas that it cannot be cultivated for years to come, but it is hoped to plant two million acres with trees, which will help to prepare them for future cultivation.

The rest of the wilderness it is hoped to cultivate when the labour and materials can be obtained. The peasants are returning to their lands, but all that they had is gone. There are no poultry, no horses, no cattle left. The missing cattle are estimated at 950,000.

The British Army has had in France during the war more than 400,000 horses, and it has now presented the French nation with 250,000 on one condition only—that the horses are well fed and humanely treated.

OLD SMUTTY

Many amusing anecdotes are told in a new book on the life of Archbishop Thomson. The worthy archbishop was much amused by a racy Salvation Army poster: "At 8 o'clock on Friday next there will be a great shout in the Camp, and the Gospel Army will attack Old Smutty." Now, "Old Smutty" is a Salvation Army name for Satan. Great, therefore, was the surprise of the archbishop when he found that an old lady believed that he was old Smutty.

ONE-PIECE HOUSE

Homes Without Bricks

A MOULDING-BOX THAT WOULD CAST A VILLAGE

One of the greatest of our peace tasks is the building of hundreds of thousands of houses in healthy conditions, so as to put an end to the shameful slum life that has undermined the strength of our people. The supply of bricks is one of the chief difficulties of the builder; there are not enough to go round. But need we wait for bricks?

Our enterprising Allies, the Americans, now tell us that houses can be poured out in abundance, as they are now pouring houses into garden cities in New York State. This is how it is done. A great quantity of concrete is made into a flowing mixture, and poured into a double framework of wood constructed in the form of a house. When the concrete sets, the framework is removed and used for another house.

Mr. Edison tried this system some years ago, but his one-piece concrete house was not the success he thought it would be. In the new method, known as the Ingersoll system, remarkable use is made of the fact that liquid concrete will only continue to flow as long as it is being poured out. Stop pouring it for a minute or two, and the mixture will begin to harden.

A gigantic moulding-box is prepared, and the liquid poured into the various sections, so that it sets hard as the work proceeds, and it is said that the process is likely to spread widely.

The concrete house is both cheaper and quicker than the brick house. With one strong wooden framework hundreds of houses—a whole village—can be cast from a single mould. Perhaps Dr. Addison, Minister of Reconstruction, will think of it.

BATTLE OF THE ENGINEERS

From Victory to Victory

A fascinating story is told of the struggle for supremacy between the builders of our tanks and the makers of German ammunition. It is a story like that of the war itself: each side, in turn, got a little ahead of the other, but British enterprise and determination won in the end.

The first tanks had bullet-proof plates on the roof; and the Germans at once attacked from the air with bombs, as the roofs would not resist bombs, and were the most vulnerable part of the tanks. So engineers made hurried experiments with many types of steel, and evolved a roof which was bomb-proof. They tested it by dropping bombs on it, and then built tanks with the new armoured roof.

Then the Germans found that by firing their Mauser bullets the reverse way—the flat end first instead of the point—they would penetrate the tanks, so that at once a still heavier armour had to be used, and again fresh tanks were built.

The Germans then made frenzied efforts to produce a bullet with still greater penetrating powers, and they very soon succeeded; the bullets had a central core of specially hardened steel. So once again our engineers had to devise more powerful armour for the tanks, and still more tanks were built, with protective plates more than five-eighths of an inch thick.

These were the tanks with which the final victory was won.

A LADY LABOURER

The daughter of one of the most distinguished members of the diplomatic service, a lady well known in London society, has done excellent work as a day labourer in Bedfordshire.

HOPE FOR BROKEN HEROES

Do Men Without Legs Live Longer?

WHY THEY MAY DO SO

By the Children's Doctor

There are compensations for misfortunes in this world; and Lieutenant Colonel Openshaw has been saying that a man with only one leg will be likely to live longer than a man with two legs, and a man with no legs longer than a man with one. That is a very bold assertion, but it is probably true, for length of life depends largely on the amount of work the heart can do.

When the working power of the heart is exhausted, its owner must grow weaker and less able to resist disease and death.

Now, the work of the heart consists mainly of pumping blood all over the body, even to the fingers and toes, and, obviously, if a leg or two legs be wanting, the heart will require to do less work, and so its energy will last longer. It might be thought that the difference of a leg or two would not make much difference to the total work required to be done by the heart, but it probably makes a considerable difference. The amount of work done by the heart, even when a man is at rest, is surprisingly large; it is equivalent to the work done in 24 hours in raising 120 tons weight one foot high, so that even the amount of work required to drive the blood through a leg represents quite heavy labour.

Hard Work of the Heart

The force required to drive the blood through the legs is particularly great, because a man is perpendicular most of the day, and the blood has not only to be driven down to his feet but pumped up to his heart again.

We know that if a man is very tired he lies down to rest, and it is chiefly his heart he is resting then, for when he is horizontal the heart has not to raise blood from the heart to the head, and from the feet to the heart, and its work is very much lessened. In cases of heart disease patients are put to bed just to give their hearts rest in this way.

So that a man without legs is always saving his heart work much more effectually than the tired man who puts his legs on a chair or lies on a sofa. And it is not unlikely, therefore, that a man with no legs may outlive a man with two good ones. But a pair of legs is rather a big price to pay for a few months or years of life; and we must remember that vigour depends on the nerves and digestion as much as on the heart, and that the man with two legs is more likely to live a healthy life than the man with one or none.

ECHOES OF FALLEN THRONES

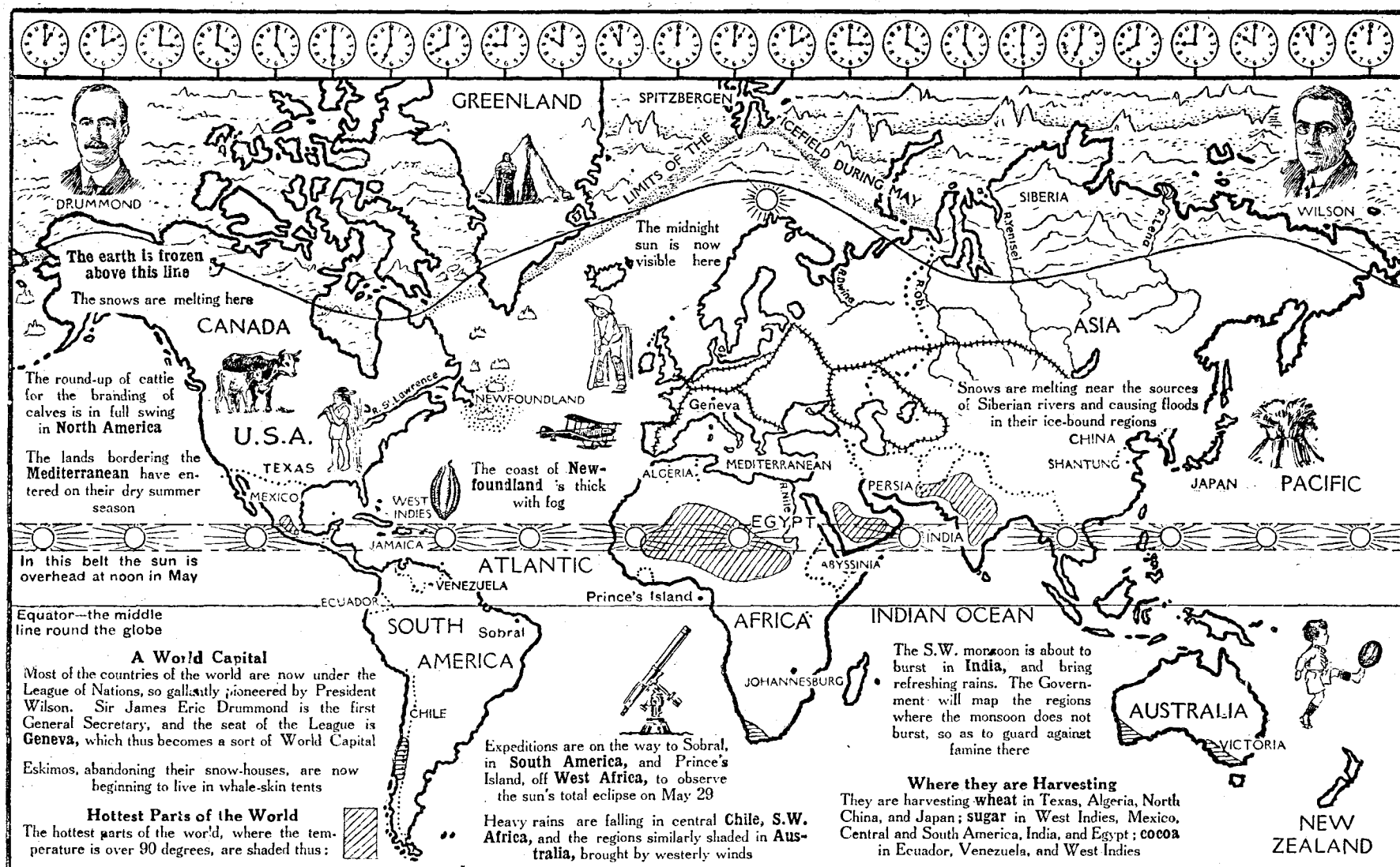
Treasure as High as a Man

While kings and thrones are falling round about us, curious echoes of ancient kingships reverberate in the papers.

In Hungary the people's commissioners who are examining the homes of the nobility have found concealed in the walls of a castle valuable treasures, among them a silver goblet as high as a man, bespangled with precious stones. It once belonged to Matthias Corvinus, who was King of Hungary in 1458.

A descendant of these kings of Hungary and Bohemia has lately died at Rugby. He was a very respectable English solicitor, Theodore Wratislaw. The Wratislavs founded the busy cities of Breslau, Prague, and Cracow, and came to England about 150 years ago, after the head of the family had taken part in an unsuccessful rebellion by the Czechs, who are only now regaining their independence in Bohemia.

PICTURE-NEWS AND TIME MAP OF THE WORLD



SHOWING TIME EVERYWHERE, WITH HARVESTS AND NATURAL AND POLITICAL CONDITIONS OF VARIOUS AREAS

Yorkshire Boy's Rise to Fame—Story of World's Greatest Chorus-Master

A Book Being Read Now

Reminiscences of Henry Coward. Published by Curwen. 10s. net.

The foundation stone of the Albert Hall, Sheffield, the city's central assembly room for meetings and concerts, was being laid by the nobleman of highest rank in England, and this is how Henry Coward saw it done.

Not having a ticket to the ceremony, and being eager to see and hear all I could, I climbed up the hoarding to witness the proceedings. I had just got a good view when a friend in the crowd shouted, "Look out, Harry! there's a bobby!" I saw "Robert" coming, and therefore made a strategic forward movement and dropped into the enclosure, where, from a discreet distance, because I was in my working clothes, I saw and heard all that transpired.

I little thought, and no one who saw the young man with his apron folded round him ever dreamt, that he would conduct more concerts in the Albert Hall that was to be than any other individual, or that he would be invited to stay at Arundel Castle by the Duke who had just laid the foundation stone.

Troubles of a Poor Boy

There, in a flash, we see the humble beginning and the hard-won victory of a man whose school-days were over when, at the age of nine, he began a 12 years' apprenticeship to a laborious craft, and who never had a teacher, yet lived to be a graduate of the greatest English University, and carried English music in a blaze of choral triumph round the world.

In this heart-stirring book Dr. Henry Coward tells in detail, simply, frankly, modestly, but with a manly natural pride, the story of his single-

handed struggle with adverse circumstances, and how he came to be what he had longed to be. No better story of the kind can be found in books.

The greatness of the story arises from the fact that the difficulties of the lad's early life were such as always surround millions of poor lads; that he faced those difficulties as any youth might face them; that the aims he set before him were always worthy aims; that the means he used were splendidly sound and true; and that when he emerged triumphant he had still the same simple, earnest, lofty character as when he set out to win.

He has now passed three score years and ten, and is satisfied and grateful, and he writes this book as a record of the journey, a memorial of friends met by the way, and an encouragement to all who have to climb the hill of success alone from the very bottom.

Making Pocket-Knives

Henry Coward was born in Liverpool, in a public-house, the son of Sheffield parents, who became entertaining musicians, his father as a player of the banjo and his mother as a singer. His father died when the boy was seven, and the family returned to Sheffield. Before he was nine he finished such education as he had got by wandering from school to school, and was apprenticed for 12 years to his uncle, a working cutler who made pocket-knives, and lived in a slum street where there were only three householders who never troubled the pawnbroker. Here the cutler lad was living when, in his apron, he saw the foundation-stone of the Albert Hall laid.

From infancy music was a passion with young Henry; and one day, when waiting in the warehouse, his master chanced to see him, and asked him what he wanted, but in these words: "Well, what is your pleasure?" "Music is my pleasure, sir," stammered the lad. "That's a nice pleasure to have!" growled the old man disapprovingly.

A Workman's Advice

Twelve hours a day was the usual work-time, when it was not thirteen; but the boy, inspired by a shrewd workman who said to him: "It's them as uses their heads as does things," rose at five o'clock, read all the books he could get hold of, joined singing classes and choirs, a Band of Hope and a Mutual Improvement class, chose studious companions, learned shorthand and the fiddle, took music examinations, and before he was "out of his time" as an apprentice was teaching singing.

So far it was not clear, even to himself, what he would become; but he was gaining all-round knowledge and confidence, and, as he says in one of the wisest sayings in the book, he felt that a stone that is fit for the wall will not be left in the road.

The way out from the workshop was by teaching. A schoolmaster hearing him teach a singing-class said to a fellow workman, "Tell Coward he is a born teacher." That decided him. Though he was earning three pounds a week as a skilful cutter at the age of 22, he became a pupil-teacher at £20 a year. Within

a year he obtained a headmastership, and then followed a period of successful school teaching, successful music teaching, fame as a choral teacher, the taking of musical degrees at Oxford University, the composition of popular cantatas and oratorios, and the training of great choirs which gave England first place in the world for choral singing on a grand scale.

The details of this musical career are given in this book, and through it all the reader is strengthened in the feeling that Dr. Coward has lived for the highest aim—for the love of his art as the means of serving the noblest of purposes. It is not given to many men to talk of religion with reverence, modesty, and fitness; but Dr. Coward can do this because in very truth he is a good man.

Glory of the Earth

Speaking of a scene that impressed him, during a country walk, he says:

The greatness, the vastness, the majesty and loveliness of God's creation burst upon my soul. Mother Earth appeared to one of her children in her most bewitching garb of ineffable beauty, and seemed to say to my inmost soul: "See the glorious inheritance with which the Creator has endowed the sons of men! Should we not serve Him, worship Him, obey Him, and thank Him for these priceless gifts?" The effect on my life has been permanent.

Dr. Coward is revealed in his book as a striking example of industry in pursuit of a set purpose, with a genius for musical interpretation; and his whole career is welded into a fine unity by lofty aims and simple goodness.

J. D.

CHILDREN'S NEWSPAPER

MAY 17 1919

A Hard Blow for the Pessimist

The pessimist has had a hard blow. The League of Nations has been born; its charter has been sealed and delivered to mankind.

That is something against which pessimism cannot stand. It is the triumph of the man who believes in noble things. It is the scientific proof that man moves on to a better world.

There will still be troubles in the world; never yet did morning wear to evening but some heart did break. There will be sorrow and woe and evil, and cares of all sorts; there will be striving and disputing, and allies and friends may quarrel. The sun may pierce the darkest cloud, but other clouds will come; storms will break and pass, but the north-east wind will blow again. It is not to be expected that sixteen hundred million people can agree about everything, or that there will be no clashing of points of view among nations and races with so many needs and so many tongues.

But if the united wisdom of mankind has not yet found a way of stopping trouble, it has done the next best thing, and found a way of dealing with it. If it has not found a golden recipe for preventing quarrels between nations, it has found a way of preventing them from running on to sudden war.

Those who believe in the future will be most disappointed that the League of Nations is not perfect. It has been born in strife. It has in its garrison at Geneva both Captain Courageous and Captain Timidity; some have come to it through fear and not through faith.

But nothing in this world is perfect, and the League of Nations as it stands after 20 days is as perfect as the railway after twenty years. It is the biggest blow ever struck at the biggest evil in the world.

What it says, on behalf of the chief nations of the world, is that they will do their utmost to live together in peace, that they will have no secret understandings and cherish no secret purposes; that in case of dispute they will put the facts before the world; and that even if they fail to agree, they will never start a war till the world has known the full facts for three months.

That is what this Covenant says, with all its faults and limits, and, unless these nations that fought to keep their word to Belgium now break their word to all mankind, war has gone out for ever; for a war that waits three months to begin will never begin at all. Wars are made in the dark, and they cannot stand the light. A. M.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London
above the hidden waters of the ancient River
Fleet, the cradle of the journalism of the world



A Thousand Men Change their Minds

THE Germans can hardly have forgotten, as they stood at the Bar of Humanity in France, that the most peaceful part of Germany when the Great Peace came was under the Allied flags. Here is a true story. A thousand men in the region occupied by the Allied Armies were threatening to strike, and a quarry from which stone was badly needed was likely to be idle. The commanding officer sent for the leaders of the men, and this is what was said:

Officer: "When does your strike begin, gentlemen?"

Men: "On Saturday."

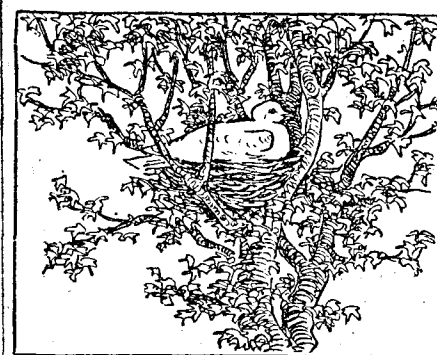
Officer: "Very well, I have no objection to your striking; but there is plenty of work to be done in France, and every man who strikes on Saturday will be sent to do it. Good-day, gentlemen."

The thousand men suddenly changed their minds, and there was no strike at the quarry.

Waking Up

GOVERNMENTS live and learn, and even kings can teach them. It is a year since a great exhibition of British scientific products was held in London. It was one of the most wonderful exhibitions of British ideas that was ever seen, and not a single member of the Government thought it worth while to go. Many people wondered why a British Government should hold aloof from such a gathering place of British brains, and we are glad to see that this year the King himself has settled it. He has given a knighthood to Professor R. A. Gregory, to whose energy the exhibition was chiefly due, and has become President of the next exhibition to be held next month. It is his way of saying to the Government, as he once said to the people, Wake up!

Proverb of the Day



Nesting Time

Every bird likes its own nest best

If thine enemy hunger, feed him. If he thirst, give him drink. Be not overcome of evil, but overcome evil with good. St. Paul

A Child's Prayer for Our Neighbours

Give us meekness, O Lord, that we may walk humbly before Thee; let us not be filled with vainglory in the greatness of our possessions.

Give us the love of our neighbour, that we may share with rejoicing the inheritance of the earth.

For what we have make us thankful; for what we would have make us worthy; for all the blessings of our lives let our lips and our hearts praise Thee.



The Troubler of the World

WHAT happens to the Kaiser matters very little to anybody now; for him life must be every hour more terrible than death, and we can leave him with his conscience as the greatest criminal since the world began. But what does greatly matter for us all is that the nations of the world, for the first time in the history of nations, have judged the author of a war and declared that he must stand where criminals have stood. The Peace Conference would have failed in its duty to all who fought and died, and to all who fought and came back home again, had it not put on record the guilt of this man who, five years ago, sat in the most dazzling seat in Europe, and is today so poor that not a dog will do him reverence.



The New June Dress of the Mother of the Children's Newspaper
Peace Hailing the World on the new Cover of My Magazine

Let Cain Pass By

ONCE before in our time the judgment of Paris has been given on a king who betrayed his people. It was written down by Victor Hugo, and his words ring true today of William Hohenzollern who made the war. Here are one or two verses written when France was wondering what to do with another wretched man:

No, Freedom! People, no! He must not die.
'Twould be too simple, too unscorned an end,
After all law destroyed, the hour brought nigh
When holy shame must back to heaven ascend.
After he has dragged France, stabbed to the heart,

To his polluted car tied by the feet;
Should the vile wretch by a sword-stroke depart,
And death like Pompey or like Caesar meet?

By this man's deed—Ephemeral Emperor—
Daughters and sons are fatherless and sad;
The widow weeps, kneels, sobs her anguish o'er;
The mother seems a ghost in mourning clad.

Keep the man living. Noble punishment!
Would that, some day, him we may
wandering find,
Naked, crouched, shivering, like reed tempest bent,
Beneath the execration of mankind.

Aged, rejected by Death's scornful hand,
Doomed, abject, trembling, through long years to plod:

People, avoid that man, marked by a brand:
Let Cain pass by, for he belongs to God.

Where Victor Hugo left it we may leave it too: leave Cain alone, for he belongs to God.

£1000 FOR BRIGHT BOYS AND GIRLS

WHAT TO DO

The editor has set aside £1000 for the benefit of boys and girls who need a little help with their education.

The Children's Newspaper hopes for the day when it will be possible for every boy and girl in these islands to climb to the top of the educational ladder. It will come. Those who promise well at school will find the way open for them everywhere, and this great country will not allow them to be kept back by poverty or want of help. Until that time comes, however, the editor will gladly help teachers and education authorities to pick out bright scholars and give them whatever chance they need.

For this purpose £1000 is set aside for the first year of the Children's Newspaper, and from this fund grants will be made on behalf of scholars in need. After considering many suggestions, the editor has thought it best to lay down no conditions, but to leave the fund entirely open so that any teacher in the kingdom can apply for a grant on behalf of any boy or girl in school.

The application must be made by letter; and the editor will then send a form to be filled up by the teacher with information justifying the appeal. This form, when filled up, must be signed by the teacher and by the chairman and secretary of the Education Committee; and the editor will do his utmost to comply with the suggestions within the limits of the fund. The decision of the editor must in every case be final.

TIP-CAT

The Brentford Guardians are forming a choir, and will pay the boys according to the quality of their voices. They will receive hard cash for their notes.

What our troops are looking forward to shelling—peas.

Weather delayed the air flight across the Atlantic, for that was one of the things that wouldn't blow over.

Lovers of light verse will be glad to hear that the Limerick strike is ending.

Gone to the dogs: the muzzie.

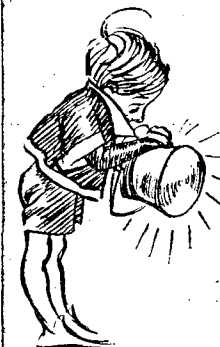
The Crown Prince has admitted that it is not improbable he will be brought to trial and executed. The prospect does not seem to alarm him; he is used to losing his head.

Motto for Harrow schoolboys accused of slouching in the High Street: Loafing is very ill-bred.

The City street cleaners threaten to strike. They are always ready for a brush with the Corporation, and are out for sweeping reforms.

The Kaiser has assured an interviewer that "the Bible is all I need for my guidance." Why doesn't somebody give him one?

A timekeeper has been posing as the son of an earl. Being a man of the hour no doubt he felt he ought to assume a striking personality.



PETER PUCK
WANTS TO KNOW
Whether some Men do not
need Muzzies more than
some Dogs?

BIRD PATRIOTS

FRIENDS WHO DO GOOD UNSEEN

How the Birds Help Britain
with its Food Supply

TESTIMONIALS FROM THE GOVERNMENT

The evil that birds do is clearly seen ;
the good is often hid.

If you talk with farmers, gardeners, or keepers they will often give many of the birds a thoroughly bad character, saying they do an immense amount of harm, and should be relentlessly destroyed. Holding these opinions, they kill as many birds as they can. The truth is that they are partly right and partly wrong, but are rather more likely to be wrong than right, because they see when the birds are doing harm, but do not see when they are doing good.

Some birds are always helping the farmer and gardener by killing insects, worms, and animals that would be terribly destructive to crops and fruit, and often these birds do not feed on the food the farmer grows. A great deal of the good they do, however, is unnoticed because it is done not in harvest-time, but in winter, when the larvae of destructive insects or the seeds of destructive plants are eaten in huge quantities, so protecting the next year's crops.

Birds with Good-Conduct Badges

Some birds, again, are partly protective and partly destructive. They eat the destroyers of corn and fruit, but in harvest-time they also eat a share of the corn and fruit itself. It is only by careful watching and experiment that we can decide between the birds that do good and the birds that do harm.

But lastly there are the birds which are almost wholly destructive, and can be destroyed with benefit to mankind.

The Natural History Department of the British Museum has now given birds certificates of character according to their good or evil deeds.

We give on another page pictures of 18 of these bird friends of the farmer. Here is the full list:

Pheasant	Corn-crake	Kestrel
Tawny owl	Barn owl	Nightjar
Swift	Cuckoo	Swallow
Sand-martin	Wren	Redwing
Wheatear	Skylark	Starling
Rook	Jackdaw	Magpie
Jay	Peewit	Robin
Common partridge	Black-headed gull	
Golden plover	Stone-curlew	
Long-eared owl	Short-eared owl	
Green woodpecker	House-martin	
Spotted flycatcher	Song-thrush	
Hedge-sparrow	Garden-warbler	
	Willow-warbler	
Great titmouse	Coal titmouse	
Blue titmouse	Pied wagtail	
Yellow wagtail	Meadow-pipit	

with the greater and lesser spotted woodpecker, golden-crested wren, and red-legged partridge.

Birds to be Encouraged

Among the birds that may be encouraged without a doubt are swallows, martins, swifts, wrens, tits, robins, the thrush, chaffinch, hedge-sparrow, wagtail, lark, and our friend the cuckoo.

The starling and rook are helpful if they are not too abundant. They prefer to eat the things harmful to man's food, but when they are in great numbers they exhaust their natural food supply, and then become thieves, and steal corn because it is easier to get than insects.

It is rather saddening to think that the blackbird, the sweetest songster of them all, and the friendliest bird next to the robin, has not the best of characters judged by his summer food.

SHALL WE USE GAS OR ELECTRICITY?

The suggestion that the Government should turn coal into electricity at the pits is leading to a keen struggle between gas engineers and electricians.

Sir Dugald Clerk has come forward as the champion of gas. He says we now burn every year about forty million tons of coal in our houses, whereas the gas-works could give us the same service with twenty million tons; and to produce the same amount of heat by the most improved electrical methods at least sixty million tons of coal would be needed.

Electricians are not downcast at this attack by our leading gas engineer. They have merely become bolder in

their plans for dominating our islands. They are annexing the gas engine! Their scheme is to turn coal into gas at the pit-head, and there use the gas to work engines for producing electricity.

Gas will probably remain for a long time supreme for heating purposes; and a great contention is raging between the merits of gas and electricity for lighting. There the electricians are again using a gas to help them out of their difficulties. They fill a wired bulb with an inert gas, and obtain from it more light at less cost. The gas engineers then try to devise a better burner, and so the struggle goes on—all for the benefit of the nation.

MRS. THOMAS ATKINS

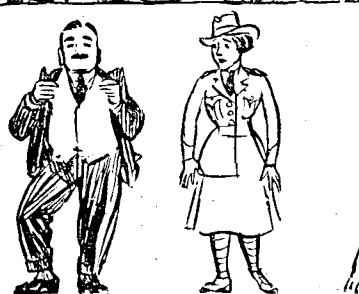
1915



1917



1919



In 1915 Thomas Atkins put on khaki and went to the war.
In 1917 he came home on leave and found his wife in khaki.
In 1919 he came home demobilised with his wife still on active service.

BY TRAIN THROUGH AMERICA

Linking up the Continent

American engineers have found a new task on which to employ the great productive power they developed during the war.

There is a series of great breaks in the railway system of the New World. The northern lines run from Hudson Bay through the United States to Mexico; the southern lines extend from Peru to Argentina. In between there are large gaps, with fragments of local lines here and there.

It is now proposed to link northern and southern lines together in one grand American system. Construction is beginning between Mexico City and Yucatan, and surveys are being made for a line to Panama. The mountains of Colombia and Ecuador are being mapped out for conquest by steam-power, and in Peru the central railway is being extended.

Continuous railway travel for 11,000 miles, from Hudson Bay to Buenos Aires, may be possible before very long. At present the best steamers take 25 days from Buenos Aires to New York; trains could go in 15 days.

ELECTRIC AIR POCKETS

Can we get Power from the Sky?

We live on our troubles. Now that coal has become scarce and dear our men of science are looking for a larger, freer source of power.

We dwell beneath a sea of inexhaustible forces. A little of it we sometimes use by means of windmills and sails; but far more important than the wind is the store of electric energy in the air. Practically nothing has been done to use it since Benjamin Franklin sent a kite up in the thunder-clouds and brought down a current of electricity; but a new movement is now starting for promoting researches into this vast reservoir of force at the bottom of which we grope.

We need an appliance to fix on our houses and factories so as to collect the electricity in the air and convert it into currents for lighting, heating, and working purposes. The electric energy exists in countless tiny pockets round the particles of gases in the atmosphere. In a thunderstorm the energy is suddenly massed together with terrific force, the minute charges running into the great lightning flash.

What man requires to abolish all poverty is a method of doing continually on a small scale what is naturally brought about in a thunderstorm.

SCENE IN THE SKY

Two Worlds Approaching Each Other

NOBODY KNOWS WHERE HE WAS BORN

By Our Astronomical Correspondent

The most interesting event in the sky next week will be the near approach of Venus to Jupiter.

In February, 1916, when they were last so near together, a popular notion was that they were lights suspended from a moored airship on the watch for Zeppelins; and the writer found it impossible to induce some people to believe they were two great worlds.

They will be at their nearest to each other on May 25, when they will be only two degrees, or four moons, apart in the sunset sky, and the effect will be very striking. Venus, the brightest world, will be to the north.

1300 Miles a Minute

All the week it will be interesting to watch them draw closer, or *appearing* to do so, for actually they are getting farther away, the illusion being due to the effect of the combined motions of the Earth, Venus, and Jupiter, and the different speeds at which each is travelling. Far-off Jupiter is majestically rolling along at 500 miles a minute, while the Earth sweeps on at 1100, and Venus at 1300 miles a minute—so that it would not take Venus long to cross the Atlantic.

Already Venus has reduced the distance between herself and the Earth by 30 million miles since she was first referred to in here eight weeks ago, so that she is now about 100 million miles away, only about six million miles farther off than the Sun. Jupiter, however, is being left behind, farther and farther away, and getting perceptibly smaller; he is now nearly six times as far away as Venus, and in eight weeks' time he will be at his farthest, and pass behind the Sun. We can watch him getting nearer to where the Sun has set, while Venus will rise higher and grow brighter as she approaches.

Your Birth-place in Space

Truly things are not what they seem. In what appears to us the tranquil heavens everything is in rapid motion, and nothing is at rest; even our glorious Sun, every morning when we look up at him again, is a million miles from where he was the day before; and this goes on every day, so that at the end of a year he has gone 365 million miles. On for ever he goes thus, yet the Sun appears no farther off than he did 12 months ago, because Earth travels with him.

Have you thought how far a man must travel in space on our earth in a life-time? A man who dies at 80, dies 29,000 million miles from the spot in space where he was born; and if you are 15 years old, you are now reading this paper about 5400 million miles away from the place in space where you were born. It may be said truly that nobody knows where he was born!

Sun and His Family

So that it must not be supposed that when the Earth or the planets complete their journey round the Sun they come back to the place they started from. Far indeed are they from that; our Earth's annual journey round the Sun is like the journey of a man walking round the funnel of a steamship. While he is going round the funnel, the vessel is carrying him hundreds of miles away.

When we reflect that the parent of the Earth, the Sun, has led his whole family of planets, moons, and comets for thousands of millions of years on this amazing journey through space, travelling always at a million miles a day, without colliding against anything to harm them, we summon up a solemn vision of the stupendous abyss that the Sun and his family have crossed since the beginning of their Time. G. F. M.

MARVELLOUS CAMERA

Professor's Astounding
Invention

PHOTOGRAPHS A MILE A SECOND

There is a modern wizard in Manchester with a marvellous camera of his own invention, which records on a film anything travelling at a speed close on two miles a second.

It is Professor H. B. Dixon, of Manchester University, who is responsible for this wonder in photography. He has constructed the fastest camera in the world, usually taking a hundred yards of film photograph in a second. This speed is not fast enough, however, for the professor's purpose, and he is now busy studying the flame of explosions created by alcohol, petrol, and other motor fuels. He tests them singly and in mixtures, and is intent on photographing the flame of an explosion travelling at a speed of 3000 yards a second.

He has succeeded in getting his films to record a flame travelling at this speed, by fixing on the camera a lens that reduces each image to one-twelfth of the ordinary size, and setting the camera at right angles to the line along which the flame travels.

The exact measurements Professor Dixon has obtained are likely to have a great effect on the production of British motor fuel. Attached to his marvellous camera is a delicate timepiece that measures the travel of the flame down to a ten-thousandth of a second, and with these new instruments the professor is making precise discoveries of the firing-point of all the new kinds of motor fuel. He compresses them in a steel cylinder and then fires them under the eye of the camera.

THE NATION'S EXPENSES

Figures Too Big to Grasp
BUDGET FOR NEXT YEAR

No one can grasp the true meaning of the enormous figures that make up the bill of the nation's expenses and receipts now got out for last year.

The income of the country for purposes of government, taken from the pockets of the people of the country, was 889 millions of money, averaging about £19 for every man, woman, and child. This is a larger amount by 47 million than the Chancellor of the Exchequer expected, and nearly 182 millions more than last year.

So far, the figures are favourable when comparing year with year. The country has responded wonderfully to the demands made on it, both by working and paying. But this huge sum of 889 millions, gathered in to pay our bills with, was only one-third of what was spent in that year of war. Two-thirds of our spending was borrowed money, which we still owe. The expenditure was 2579 millions, or about £56 for every man, woman, and child.

The Chancellor of the Exchequer, in putting the new Budget before Parliament, estimated next year's spendings at 1435 millions, a decrease of 1144 millions. He expected the national income would be 1201 millions compared with 889 millions last year. Of this amount 270 millions will be the increased yield from the same taxes as were levied last year, and 41 millions will come from new taxes on spirits, beer, and the estates of rich men who will die. The Chancellor's figures were much more favourable than had been expected. In the coming year the country will only have to borrow about one-seventh as much money as was borrowed last year.

British Plane For 100 People GREATEST WONDER YET IN THE FLYING AGE

Wireless Telephone Brings Down
a Concert from the Clouds

AEROPLANE TO PROSPECT FOR MINERALS IN ANTARCTICA

BY OUR AERIAL CORRESPONDENT

A few months ago all the world was set wondering by a guarded statement in Parliament that the British Government possessed the greatest of all marvels in aircraft. The reference was to the new Tarrant triplane now receiving its finishing equipment.

This great plane, named after one of its designers, Mr. W. G. Tarrant, looks like a small Zeppelin with triple wings. She has a cigar-like body about 85 feet long, and a wing span of 141 feet. There are no bracing wires inside the body, so that, as far as the tail, there is a large free space in which cargo or passengers can be carried. Circular girders, with wooden filling, form the body, the design enabling the machine to fly faster for its weight than any other aeroplane.

Power is provided by six Napier Lion engines of 3000 horse-power, and a crew of eight men is required. A hundred passengers can be carried for 1200 miles at a cruising speed between 80 and 100 miles. By fitting more tanks for petrol it is possible to make the Tarrant capable of a non-stop flight of 2000 miles. Three rows of glass windows have been fitted in the body, with tiers of seats for passengers.

One pilot can steer her, but there will be separate power units controlled by other men to take the strain off the captain. As on a steamer, enough men will be carried to enable them to work and rest in shifts.

The Tarrant aeroplane, with her huge passenger saloon, almost spacious enough for playing a game of cricket in, is a challenge to the monster airship. If it should be a practical success, the next model may be capable of carrying 500 people.

Both steamship lines and long-distance railways connecting busy towns are threatened by this great plane.

Thousands Listen to Music
from the Clouds

Poets often sing of the music of the spheres, and now thousands of people, crowding in Victory Way, New York, have listened to the melody of the skies.

From the naval aircraft station at Rockaway Point, the airship C 4 soared up and over the great city, and some of the crew played music into a wireless telephone. The New York receiving instruments took the airs and led them into a hundred sound-amplifying instruments. From these amplifiers the music rang out to the delighted multitude, forming surely the most amazing popular entertainment ever known.

What a noisy world it would be if the new telephone with its amplifier were generally used by those who want to reach the public ear! Advertisements would be roared at us, speeches could be made in a hundred places at once by one man, and mendicant musicians, instead of turning a barrel-organ, could set a wireless gramophone going at the end of a sound magnifier, and make a thousand streets echo with a song.

On the other hand, when the use of wireless is regulated, we shall be able to listen to fine orchestral music and operas in our own homes as easily as we now listen to the still rather tiny talking-machine. Recorded music will be made by wireless; and some day also pictures may be sent by wireless impulses. Then the problem of the wireless moving picture will remain for future inventors.

Remarkable Plans for Flying
to Antarctica

Preparations are being made in England for a flight to the South Pole. An aeroplane, with a wireless telephone, is to be taken to the Ross Sea, in the Antarctic, and employed, in connection with a powerful wireless station, for

exploring the wild, white, and stormy continent. Then, in favourable weather, an aerial dash to the Pole will be made.

The expedition is being arranged by Lieutenant J. L. Cope, who was surgeon and biologist in the last Antarctic Expedition under Sir Ernest Shackleton. All preparations are being quickened; and Mr. Cope hopes to leave in June next year, and return in 1926.

For six years his party will keep in touch with civilisation by means of wireless, while living in the terrible land where Captain Scott and his gallant comrades sleep.

The new enterprise is mainly designed to serve such useful purposes as the investigation of the coalmines of the Polar world, and its other mineral resources, with a view to seeing if it would pay to take miners to the coal seams in summer-time, for supplying New Zealand and Australia. The movements of the whales will also be traced, in the hope of being able to restore the British whaling industry.

The expedition will also try to find the connection between the weather in Antarctica and in South Africa and Australasia; and it has been named the British Imperial Expedition.

Great Airways of Great Britain

The Air Ministry has opened seven main flying routes that centre in Hounslow, near London.

The first runs to Scotland and Scandinavia; the second to Dublin; the third to Manchester and Belfast; the fourth to France, Belgium, and Germany; the fifth to Holland; the sixth to Plymouth; and the seventh to Bristol and Wales.

Along these airways, 34 repairing and fuelling stations are working, and 86 additional aerodromes and landing grounds are being prepared by the new main lines to meet the coming flying traffic, or are awaiting purchase by enterprising towns and aviation firms. On the seven routes now opened flying men can find landing grounds, sheds, petrol supplies, and trained mechanics.

Continental traffic will be controlled at four appointed stations.

Lympne, on the Kent coast, will be the custom-house for fliers from France, Belgium, and countries beyond.

Hadleigh, in Suffolk, is the calling place for flying Dutchmen.

New Holland, on the Lincolnshire bank of the Humber, is the place of call for passengers flying across the North Sea from Scandinavia.

Hounslow is the central appointed aerodrome for everybody crossing the coast without stopping. To check air smugglers and other undesirable persons, both outward bound and inward bound craft must, at present land for examination.

Every machine using Government Airways must pass the test for airworthiness, and every pilot in a machine plying for hire must be tested for skill and fitness at intervals.

A Flapper

Though aeroplanes and hydroplanes go flying through the air like birds, they do not fly in the manner of birds; for they do not flap their wings. But now somebody has invented an aeroplane which does not fly by means of a propeller, but darts along by flapping its wings like a bird. The inventor claims that his "flapper" will lift three or four times as much weight as an ordinary aeroplane.

It certainly sounds very promising, but a broken wing would be a very serious matter.

ST. PAUL WAS RIGHT

A Wonder of the Blood

From a Professor's Chair

There is no fluid so wonderful as blood, though we must hasten to add that blood is more than fluid, for it carries millions of microscopic cells—the red and the white blood corpuscles—to which its wonder is partly due.

But we wish to pick out just a single wonder—that, while all backboneed animals have red blood, no two kinds, so far as has been tried, have quite the same red blood. And there are 25,000 different kinds of backboneed animals named and known, all the same, and yet all different. The redness of the blood is due to a complicated colouring matter called haemoglobin, which is carried by the red blood corpuscles. It is of special value because in the lungs of land animals, or in the gills of fishes, it is able to capture oxygen from the outer world, and then carry it to the inmost recesses of the body to keep the fire of life burning.

Remarkable Fact

Now, it is easy to take some drops of blood and treat them in such a way that the colouring matter takes on a crystal form, and we get crystals of haemoglobin. And the remarkable thing that we find is that the blood crystals of a dog differ from those of a wolf, and those of an Arctic fox from those of a red fox or a grey fox, and so on all round—each kind of mammal has its own particular form of red blood pigment crystal.

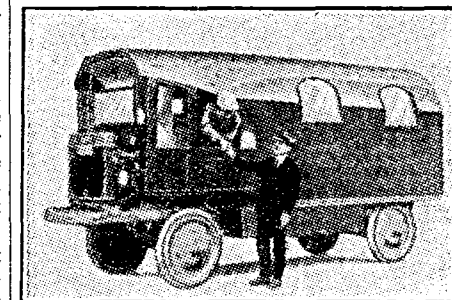
This is very interesting, for it shows us that each kind of animal is itself and no other, not only in big things, but in little things as well, through and through. What a commentary on St. Paul's saying: "All flesh is not the same flesh; for there is one kind of flesh of men, and another of beasts, one kind of flesh of birds, and another of fishes." J. A. T.

MOTOR-CAR FROM A TREE

Clever Piece of Work in
the Wilds

A man who lives in the wilds of California has done a wonderful thing. He bought a light motor truck, took it into the heart of a forest, cut down a great tree, 11 feet across, and worked for seven months hollowing it out and fashioning it into the body of a motor-car. It is really a motor house or a motor Pullman car, and here are some particulars of it.

The shell in its unfinished state weighed about 6000 pounds. At the end of two weeks of drying and seasoning this had been reduced to 4800 pounds. Windows were cut in the sides and a



A Motor Pullman cut out of the solid trunk
of a tree

rear doorway was made, after which three rooms were hewn out.

They are not ordinary rooms, but are furnished luxuriously. A fireplace is built on one side of the living-room; the beds are wonderful creations, with soft mattresses, that fold down at night. The toilet arrangements include clever little drawers and plate-glass windows; and the whole car is lighted with electric light. The finished body is 19 feet long, the whole trunk being one solid block of polished redwood of beautiful grain. The rear door is also a solid block of redwood weighing 400 pounds.

COCKCHAFER COMES Emergence of an Enemy Beetle

THE MAY-FLY'S STRANGE STORY

By Our Country Correspondent

About this time we begin to see that destructive and unmitigated pest, the cockchafer, on the wing. Everybody knows it, for it cannot be mistaken for any other insect. In shape and colour it is very much like a brown filbert nut; and a perfect specimen has its wing-cases covered with yellowish down.

The creature has not one redeeming feature, and continued warfare should be waged against it. Its life history is an astonishing one. The female lays her eggs in the soft soil, and after a few weeks these hatch out, and the young grubs, known in some parts as "white worms," begin to feed on the tender roots of grass. For three years they remain in the ground, growing larger all the time, and as they get stronger they tackle other roots besides grass, doing immense damage even to potatoes. The larva hibernates, and in the third year changes into a pupa; and the perfect beetle emerges about August.

The Cockchafer

On the Continent it sometimes causes so much ruin that the leafless landscape looks like winter. Even in England in the grub state the cockchafer has been known to destroy whole meadows, denuding them entirely of their grassy covering. The difficulty is that the grub keeps out of sight as the beetle keeps out of reach. Where the cockchafer abounds moles and rooks should be encouraged, for they are its mortal enemies.

It is a pity that more interest is not taken in the humbler insects, for their life stories are often more romantic than those of the birds and butterflies. Take, for example, the may-fly, which, strange to say, in its perfect state has no mouth and cannot eat. You will begin to see it about now, and will recognise it on account of its unequal wings, the lower pair being very small.

Throwing Off Its Coat

In its larval state the may-fly lives in U-shaped burrows under water in the banks of rivers and ponds, where it feeds upon decaying plants. It passes two or three years in the larval and pupal state, and then the pupa comes out of the water, the skin splits, and the insect emerges and stretches its wings, flying slowly to a tree or post. Here it rests for a time, and then the skin again splits, and the insect emerges a second time, and reaches its final state with wings lighter and tail threads longer. It lays its eggs, and dies in a few hours.

The soldier beetle is another insect worth watching for. It haunts flowers, is reddish yellow in colour, and about half an inch in length. The little midge which creeps into plums, the golden-green dragon-fly, and the greasy fritillary and small heath butterfly are now appearing, with the common heath moth.

The Birds and Flowers

The goldfinch, tree pipit, blackcap, sedge warbler, and whinchat are all laying; the greenfinch has hatched out her brood; and the young starlings should be fledged. The house martin is building; and we may look out for the spotted flycatcher in the garden or on the edge of the wood or coppice. The pugnacious great tit has ceased its song; but we may see it attacking smaller birds in a ferocious manner.

In the orchard the raspberry is flowering, and the mulberry coming into leaf; while among the additions to the wild flowers may be found the buckbean, field fleawort, silverweed, star of Bethlehem, upright crowfoot, ragged robin, crosswort, white campion, white clover, common gromwell, mignonette, slender foxtail grass, and field scorpion grass.

C. R.

THOMAS MOORE'S SONG FOR CHILDREN The Minstrel Boy

Words by Thomas Moore
Music by J. Cuthbert Hadden



HOW WE PAY HANDS AND BRAINS AND RED NOSES

It was Professor Huxley who said science brought a man fame but no puddings. The investigation of the wages of miners, railway workers, and other manual toilers has much disturbed the peace of mind of those who had thought these men well paid. But a scientist, quite sympathetic to the men, has made comparisons between the wages earned by hand and by brains.

He shows three grades of miners earning, severally, £275, £192 10s., and

£137 10s. a year of 50 full weeks. Then he points out that at Cambridge University 56 University lectureships average £108 a year, and 13 University readerships average £276. Sir J. J. Thomson, one of the greatest men of our age, who today is revolutionising thought in relation to matter, received from his professorship £950 a year, and we pay a red-nosed comedian £500 a week! What do we pay Sir Norman Lockyer for his discovery of helium? Nothing!

NEXT WEEK IN THE GARDEN

Make successive sowings of radishes, cos and cabbage lettuce. Make weekly sowings of mustard and cress. Sow turnips for summer use, and annuals for succession. Stake and tie plants that require it in the borders, taking care not to tie them too tightly.

NATURAL FACTS OF THE DAY

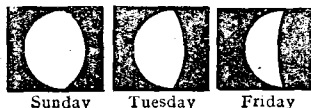
The universe moves to order like a clock. Sunrise and sunset, moonrise and moonset, high tide at London Bridge, ever they come and ever they go, while nations rise and fall.

Here is next week's time-table of sun, moon, and sea, given for London, from Sunday, May 18.

Time-table of Sun, Moon, and Sea

	SUNDAY	TUESDAY	FRIDAY
Sunrise	5.7 a.m.	5.5 a.m.	5.1 a.m.
Sunset	8.46 p.m.	8.49 p.m.	8.53 p.m.
Moonrise	11.52 p.m.	12.25 a.m.	1.42 a.m.
Moonset	8.31 a.m.	9.37 a.m.	1.14 p.m.
High Tide	4.53 p.m.	6.0 p.m.	8.31 p.m.
Moonset	Black figures indicate next morning.		

This
Week's
Moon

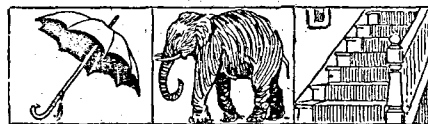


Other Worlds. Early in the evening Venus is in the West, higher up; Jupiter is to the South West, but getting more to the West. These planets are now approaching one another.

ICI ON PARLE FRANÇAIS



Le drapeau L'omnibus Les fraises



La parapluie L'éléphant L'escalier

C'est le drapeau de la liberté
L'omnibus a deux chevaux
Maman m'a donné des fraises
C'est une parapluie de soie
L'éléphant reconnaît son maître
L'escalier est escarpé

L'EXCUSE

Charles Lamb, si renommé pour son charme personnel et l'esprit révéle dans ses fameux essais, n'était pas aussi célèbre pour sa ponctualité. Il arrivait toujours en retard au bureau de la Compagnie des Indes Orientales, où il travailla pendant bien des années.

Un jour, son chef le réprimanda ainsi: "Vous arrivez bien en retard, Monsieur Lamb."

"Oui," répondit Lamb, en souriant, "mais il faut vous rappeler que je m'en vais toujours de très bonne heure!"

Ella Wheeler Wilcox's LETTERS TO GIRLS

4. The Bright Way of Life

MORNING PRAYER

Let me today do something that shall take
A little sadness from the world's vast store,
And may I be so favoured as to make
Of joy's too scanty sum a little more.

Let me not hurt, by any selfish deed
Or thoughtless word, the heart of foe or friend;
Nor would I pass, unseeing, worthy need,
Or sin by silence when I should defend.

However meagre be my worldly wealth,
Let me give something that shall aid my kind—

A word of courage, or a thought of health,
Dropt as I pass for troubled hearts to find.

Let me tonight look back across the span
'Twixt dawn and dark, and to my conscience say,

"Because of some good act to beast or man,
The world is better that I lived today."

Optimism is as necessary in building a lovely character as stained-glass windows in a cathedral. Optimism, when not a natural gift, can be cultivated. Begin by looking for some good quality in everyone you meet, and some pleasant incident in every day of life.

Look for the Best

To a very large extent we find what we look for persistently. Two girls go for a walk; one looks in the roadway for pebbles to place in her rockery, one for flowers by the wayside to fill her vases. Each comes back laden with what she sought, one with stones, one with flowers, yet both trod the same road.

Just as it is more agreeable to feel pleasure than annoyance, so life will afford you more satisfaction if you seek and find virtues instead of flaws in people. It will benefit you; it will encourage others. You know how pleased you are when someone praises you for some worthy act or some good quality. That is human nature, and you have it in your power to give some fellow-pilgrim every day a moment of this happiness.

According to religious teachings, it is not only human nature to like praise and appreciation, it is also the Divine nature. We are taught that we should constantly praise God and all his angels for the blessings they bestow on us.

Fault-Finding

You will find in every human being you meet something that is praise-worthy, and you should speak of it.

Begin at home. Children too often take as a matter of course the benefits and blessings of a good home. Frequently sons and daughters are encountered who complain of what they lack; rarely do we meet one who is quick with the word of appreciation and gratitude for parents and teachers. Praise your brothers and sisters for their good qualities. Give nine words of praise and one of kindly criticism.

Criticism, when made by those who love us, who appreciate the best in us, is a great aid in the development of character.

No one can develop on praise alone. The one word of criticism with nine of praise is like the one rainy day in the week, which revives Nature after a spell of bright sunshine. But in too many homes the order is reversed, and nine words of criticism and fault-finding are given for one of praise. Criticism is not to be mistaken for fault-finding. One, properly given and received, is constructive; the other is destructive.

Let Us Give Praise

Seeking for popularity is not a noble impulse; but, beside all other benefits to be derived from the habit of bright and optimistic conversation, a girl who is ready with good words about people and life is sure to be popular. Every circle will open to her, and she will never lack friends. We cannot blind our eyes to the fact that human life is full of hurts, sorrows, and shadows. But because we know this we love those who help us to forget it.

Look for things to praise, dear girl, and praise them.

E. W. W.



MARTIN CRUSOE

A BOY'S ADVENTURE ON WIZARD ISLAND

Told by T. C. Bridges, the popular story-writer

What Has Happened Before

Martin Vaile, flying to an island in the Sargasso Sea, in response to a mysterious wireless call, finds there Professor Distin and his negro servant, Scipio Mack, living alone. Martin is welcomed by the old and clever Professor, whose submarine has disappeared, and whose peace is disturbed by attacks from Lemuria, the next island. The Lemurians land and capture Martin, but he escapes, and on returning finds that one of two captured Lemurians is missing.

From his aeroplane Martin sees the escaped Lemurian being attacked by a huge bird, and, later, with Scipio, dresses his wounds and brings him back to the cave.

They discover that Akon and Thur, the two Lemurians, are descended from the old Norsemen; and the Professor hopes to be able to learn their language and find out from them more about these mysterious islands.

Professor Distin is worried by some secret danger that confronts them all. After a severe earthquake shock on the island he decides to show Martin the cause of his anxiety.

CHAPTER 22

The Fiery Lake

Professor Distin was very silent as the launch went rushing across the lake. As for Martin, he, too, sat without speaking, watching the long trail of white foam which spread away across the dark-blue water of the deep tarn.

The launch slid in under the shadow of the tall cliffs opposite. It was getting well on in the afternoon, and the sun was low. Martin looked up at the towering walls of rock and at the great peak above. He noticed the thin cloud of smoke which rose from the flank of the great volcano, and began to feel curious as to the object of their trip and the nature of the Professor's warning.

But the Professor said nothing. He sat very still, steering the launch straight in towards the foot of the tall precipice that bounded the lake.

Just as it seemed as though they were going to run hard against the cliff, Martin saw an opening, and presently they were in a deep narrow fiord similar to those which Martin had already seen on the other side of the lake. This one, however, was longer and deeper than any which Martin had seen, and its sides were so lofty that the cliffs seemed almost to meet overhead. They cut off the light, so that the calm water at the bottom looked like dark-green glass. There was no sign of life in the gloomy place.

The Professor kept straight up the centre of the fiord. It curved to the right, and as the launch rounded the bend Martin became aware that there was a beach in front, and, beyond it, a long rough slope running steeply upwards.

The Professor stopped the motor. The launch glided gently up to the beach and grounded quietly on soft, dark-looking shingle.

"We get out here," said the Professor.

Martin followed him up the slope. It was rough walking, and at every step their feet sank ankle deep into soft, dark, powdery shale. "Looks like ash," said Martin under his breath.

"It is ash," answered the Professor in an equally low voice.

Every now and then he was forced to stop and take breath. At last they left the ash slope and got on to a narrow ledge-like path running along the face of the cliff which rose to the right.

And now Martin became aware of a curious slow sound. It was like the bubbling of a giant kettle. Every now and then there was a sharp snap almost like the bursting of a cycle tyre.

The Professor stopped and took something out of his pocket which he unfolded and handed to Martin. It was a kind of mask.

"Put it on," said the Professor. "If the draught draws down the cleft the fumes are sometimes very bad."

He showed Martin how to tie it on, then donned one himself. It gave him the oddest appearance, but, all the same, Martin did not feel like laughing. The Professor's looks and tone made him feel sure that this business was something really serious.

The ledge, if narrow, was better than the ash slope. They got on more quickly. But as they moved forward the bubbling sound grew louder and whiffs of sulphurous gas met them. In spite of the mask they caught Martin's throat and nostrils and made him choke.

In half an hour they had climbed several hundred feet above the water-level. The cleft was still as narrow as ever and its coal-black walls still towered high overhead. As Martin looked up it struck him that it had not been long made. The rocks were very little worn by weather, and there was not a blade of grass or any green thing to be seen.

Meantime the bubbling grew louder and louder, and presently Martin saw that they were getting to the end of the gorge, which seemed to break off abruptly. The Professor turned and signed to Martin to go quietly. Then he himself went cautiously forward.

Presently he stopped, and beckoned Martin to come up. Martin did so, and a moment later found himself standing on the very rim of an immense bowl of rock and looking down into a sea of living fire.

Although the sounds he had heard had prepared him for something of the sort, the grandeur and horror of the sight left him speechless. All he could do was to stand on that tremendous verge and stare down dumbly into the awful cauldron that yawned beneath.

The crater was about a third of a mile across, the sides were of dark volcanic rock broken by great spurs, and at the bottom, some three or four hundred feet beneath the rim rock, there heaved and bubbled a lake of lava. In the centre, where the molten stuff bubbled up, the glow was so intense it hurt the eyes to look at it. Nearer the edges the stuff was cherry red. But none of the surface was at rest, even for a moment. All of it boiled and seethed like a cauldron hung over a hot fire. Every moment great bubbles rose, swelling six or eight feet high and perhaps twenty across. These, as they burst and fell, produced the popping noises which he had heard.

The whole surface smoked constantly, but the fierce heat rising from the molten mass carried up the smoke with it, so that the surface of the burning lake was very little hidden by the vapours of its burning. The spot they stood upon was at the bottom of a gap in the crater rim. Everywhere else the black cliffs towered up two to three thousand feet.

The sight was a terrible one, yet so fascinating that Martin could not take his eyes off it. He was roused at last by the Professor's

voice, and saw that he had drawn back a little and removed his mask.

"What do you think of it, Martin?"

"It's the most wonderful sight I ever saw," declared Martin.

"Yes, but does nothing else occur to you?"

Martin looked around, and stared up at the huge walls of the crater.

"Yes," he said. "I had no idea that a crater could be so deep."

The Professor nodded.

"Ah," he said, "that is what I meant. If you will look again you will realise that the surface of the lava is very little above that of the lake outside. Now do you realise the danger?"

CHAPTER 23

Invasion!

Martin drew a long breath. In a moment the real extent of the peril flashed across him.

"Krakatoa," he breathed.

"Exactly. I see you understand.

That tremendous explosion, the greatest ever known in the history of volcanic eruptions, was caused by the sea bursting in upon a vast mass of molten lava. The result was that thousands of tons of water were instantly turned to steam. Two-thirds of an island nearly as large as this were blown into the air, three hundred villages were destroyed, the wave thrown up washed all round the world, and the sound of the explosion was heard three thousand miles away. As for the dust, it hung in the upper atmosphere for three years."

"And you think that may happen here?" gasped Martin.

"It will happen sooner or later," replied the Professor, with deadly certainty. "This rift has been formed within the last century, and even within my recollection is deeper and wider than it used to be. The increasing severity of the earthquakes proves that the subterranean disturbances are increasing."

Martin whistled softly.

"Then we are living on a boiler with the safety valve screwed down. Strikes me that we had best quit as soon as possible," he said.

"Yes," said the Professor. "I am afraid that is the case." He paused, and shook his head. "Martin, I am fond of this place. I had hoped to end my days here. But I have come to think that, old as I am, the catastrophe may occur before I am due to go out of this life. Yet I am most anxious to solve the problem of Lemuria and of its people. And if it be possible, I would wish to visit the other island before I return to the world of men."

"I'll take you there, sir," declared Martin stoutly. "Just wait until we've made Akon understand what we are after. Then I'll take him over in the Bat and come back for you. With Akon to help us, it will all be plain sailing."

"Indeed, I hope it may be," said the Professor earnestly. "And now, Martin, if you have seen enough, let us get back. These vapours and the heat try my old throat and lungs sorely."

Next day Martin was up early and at work repairing the Bat, the planes of which had been badly ripped by the talons of the cliff eagles. The Professor meanwhile was with Akon, reading to him the

Icelandic Sagas, and doing his best to master the language himself.

The days went by quickly. When Martin had finished the repairs of the Bat, he busied himself in the garden, and in the evenings he worked at the Norse language. Akon, now quite himself again, was free to go where he liked; and it amused Martin to show him the turbines, the electric light, and other scientific apparatus.

The Bat was Akon's principal source of wonder. He would go and stand by it and stare at it for minutes at a time, but never offer to touch it. The launch itself puzzled him a good deal, but he was able to understand that the screw drove it, though how the screw was made to work by the oil engine was a mystery to him.

Thur, the other Lemurian, was still unable to do much. He was a silent person, rather stupid, and evidently stood in awe of Akon.

One evening, when Martin came in, he found the Professor waiting for him.

"Martin," said the old gentleman quickly, "I was right. Akon is the son of the King of Lemuria. He made me understand that today. What is more, he says that his people will certainly come after him. I gather that they have a considerable fleet of long-ships, and will probably come in force."

"They've been long enough about it," replied Martin.

"That to me makes matters look the worse," declared the Professor. "It means that they are making great preparations. And if a large force were to invade us I do not see what we could do. I do not like the prospect at all."

Martin considered a moment.

"Tell you what, Professor," he said. "I'll go and see. Tomorrow I will take the Bat and fly to Lemuria, and bring back word of what is happening."

The Professor nodded.

"Very well, my lad. But come back as quickly as you can."

The Bat was in first-rate order, and when, true to his promise, Martin started out soon after daylight next morning, he found her great twin engines working to perfection. He taxied out to the middle of the lake, then rose and, circling upwards until he got his height, headed due west for the mysterious island.

It was another wonderful day, so calm that the smoke from the volcano rose straight into the azure sky, spreading out into a kind of parasol at an enormous height. Beneath, the ocean lay, like silk. There was very little weed in the waters which separated Lost Island from Lemuria, but out on the rim of the horizon the brown stuff lay in long dark ribs across the peaceful blue.

Very swiftly Lemuria leaped into view. It was, Martin saw, a larger but less mountainous land than Lost Island. But before he was near enough to examine any details a number of dark spots stretched in a long line across the sea caught his attention. From his dizzy height they looked no larger than water-beetles, but it did not need a second glance to tell him what they were.

The Lemurian fleet had already put to sea. Before night the long-ships would be upon Lost Island.

TO BE CONTINUED

Five-Minute Story

THE CAT IN THE BAG

Michel was a cat that lived through the great siege of Paris, in the time of the Franco-Prussian War, when men were so hungry that dogs and cats, and even rats, were more precious than gold.

Michel had a mistress who loved him, and the mistress had a maid who adored him, and would have starved cheerfully rather than Michel should go unfed.

Then one black day during the siege came the dreadful command that all cats must be delivered up for food, and Léonie and her mistress wrung their hands in despair; for it was not very pleasant to think of their big, purring, loving Michel being made into soup.

"My treasure!" cried Léonie. "Never will thy Léonie let thee enter the cooking-pots of those miserable ones! See, madame, the chimney is wide, and has a convenient nook, and Michel has more brains than those who will seek him. Also, your silk bag is large and soft. Here we will hang him when danger comes along."

So while other French families mourned for their pets, Michel slept peacefully under Léonie's bed in a bonnet-box, and at the slightest approach of danger he was whisked into the great silk bag in the chimney-place.

Then there came a day when madame almost let the cat out of the bag!

She went to receive their meagre rations from the butcher, and so skinny and scarce were they she cried in exasperation: "Why, they are not even fit for the cat!"

She could have bitten out her tongue, for the butcher was a suspicious man. She hurried home, and Michel was whisked into the chimney. And none too soon, for cat-hoarding was food-hoarding in those days, and almost at once a loud knock echoed through the house.

Léonie hurried to the door.

"Madame has a cat? Come, my little one, that is bad in these hungry days; it is necessary to search."

"Search away, gentleman!" cried Léonie. And she knelt by the great empty chimney-place, polishing her pots and pans, and never a purr nor a miaow was uttered by the wise Michel.

At last the searchers marched away.

"Poor Michel! We must release him," said his mistress.

"Never!" cried Léonie. "Those miserable ones are not wise, but they are cunning. They will return."

She was right. In a few minutes the searchers returned, hoping to take the cat-hiders by surprise. But they found nothing.

So Michel lived through the siege, and when peace came, and Léonie and her mistress no longer feared to lose their heads if he were discovered, he lay once more basking in the sunshine, while Léonie scrubbed and polished her stone steps, and boasted to her neighbours about Michel, the wise, who went into a silk bag instead of into the soup.

All this is true; it really happened.

NEXT WEEK'S BIRTHDAYS & WHAT HAPPENED ON THEM

Sunday, May 18. After ten years of conflict, a considerable section of the Established Church of Scotland broke away from that body and formed the Free Church of Scotland in 1843.

Monday. James Boswell, the celebrated biographer of Samuel Johnson, died in 1795.

Tuesday. Ascension Island was discovered in 1501. The British took it in 1815, on account of the detention of Napoleon at St. Helena, 685 miles away.

Wednesday. The Manchester Ship Canal, constructed at a cost of over 15 million pounds, and making Manchester an inland seaport, was opened in 1894.

Thursday. Richard Wagner, the great composer, was born at Leipzig in 1813.

Friday. Girolamo Savonarola, whose fiery eloquence aroused the conscience of Europe, was put to death in 1498.

Saturday. Queen Victoria was born one hundred years ago.

Too Much Bed Makes a Dull Head

D! MERRYMAN

"Ah!" sighed Tommy, when his friend told him that his coat was too short. "I know it is, but it will be long enough before I get another."

□ □ □

A Magic Square

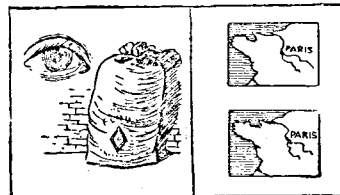
The magic property of figures is always of interest. This combination square of figures is a clever arrangement which, added up, gives a total of 34 in no less than 20 different ways.

9	16	2	7
6	3	13	12
15	10	8	1
4	5	11	14

The four corners added together make 34 ... 1 way
The columns from top to bottom ... 4 ways
The columns from right to left ... 4 ways
The columns added diagonally ... 2 ways
Adding up adjoining squares in all possible ways ... 9 ways

Giving a total of ... 20 ways

Is Your Name Here?



Do you know what boy's and girl's names these pictures represent? Answers next week

□ □ □

Yawcob Strauss

I haf von funny leedle poy
Vot gomes schust to mine knee,
Der queerest schap, der createst
rogue,
As efer you dit see.

He runs, und schumps, und
schmashes dings
In all barts of der house;
But vot of dot? He vas mine son,
Mine leedle Yawcob Strauss.



He got der measles und der mums,
Und eferyding dot's oudt;
He shills mine glass of lager bier,
Poots schnuff indo mine kraut.

He fills mine pipe mit Limburg
cheese,

Dot vas der roughest chouse;
I'd dake dot vrom no oder poy
But leedle Yawcob Strauss.

He dakes der milk-ban for a dhrum,
Und cuts mine cane in dwo
To make der schticks to beat it mit.
Mine gracious, dot vos drue!

I dinks mine hed vas schplit abart,
He kicks oup sooch a touse;
But never mind, der poys vas few
Like dot young Yawcob Strauss.

He asks me questions sooch as dese:
Who baints mine nose so red?
Who vas it cuts dot schmoodth
place oudt
Vrom der hair ubon mine hed?

Und where der plaze goes vrom der
lamp
Vene'er der glim I douse?
How gon I all dose dings eggsblain
To dot schmall Yawcob Strauss?

I somedimes dink I schall go vild
Mit sooch a grazy poy,
Und vish vonce more I could haf
rest
Und beaceful dimes enshoy.

But ven he vash asleep in ped,
So quiet as a mouse,
I prays der Lord "Dake anyding.
But leaf dot Yawcob Strauss."
CHARLES F. ADAMS

□ □ □

Do You Live at Dunbar?

Dunbar comes from dun, or don,
the Celto-Saxon for fort, or mound,
and bar, or var, the Gaelic for
point, or summit. Dunbar there-
fore means "the fort on the point."

□ □ □

How Willie Earned a Sixpence

"There are a lot of things that I
hear about," said Willie, "but I
never see them."

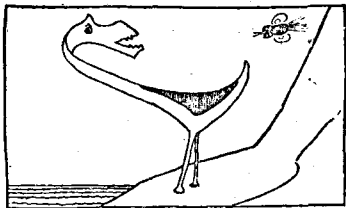
"I will give you a penny for
every one you can name," said his
father. Here is Willie's list:
A hair from a hammer's head.
A wink from the eye of a needle.
A blanket from the bed of a stream.
A tooth from the mouth of a river.
A toe from the foot of a mountain.
A feather from the wing of an army.

□ □ □

An old hedgehog made an old joke.
"Where's the point?" asked the
frog, with a croak.
"It has none." "Gee whiz!
But it has—there it is!"
Cried the hedgehog, and gave him a
poke.

□ □ □

The Zoo that Never Was



The Snappit

One day an insect chanced to sail
Close to a surly Snappit's tail.
The Snappit snarled and turned
its head;
The insect uttered "Phew!"
and fled.

□ □ □

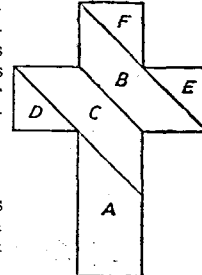
"I'm terribly worried. I wrote
Jack in my last letter to forget
that I had told him I didn't mean
to reconsider my decision not
to change my mind, and he seems
to have misunderstood me."

□ □ □

ANSWERS TO LAST WEEK'S PROBLEMS

Greek Cross Puzzle

The accom-
panying dia-
gram shows
how the pieces
should be
placed to-
gether.



Is Your Name Here?

The names
represented
were Abel and
Angela.

Order Next Week's Now

Belinda's New Hat

"Hallo, Ma!" said Jacko. "What's that you've got—a young beehive?"

"Beehive indeed!" cried his mother indignantly. "It's a market-basket—and a very nice one, too; a present from your Aunt Susan Jane!"

"What a present!" said Jacko. "Aunt Susie Toosie is a muff. She should have sent you a good big wet plum-cake."

"Who ever heard of a wet plum-cake!" said his mother. "What does the boy mean?"

"I know," said Big Sister Belinda, coming into the room as her mother went out. "A rich one, cram-full of fruit."

And then she caught sight of the basket lying upside down on the table.

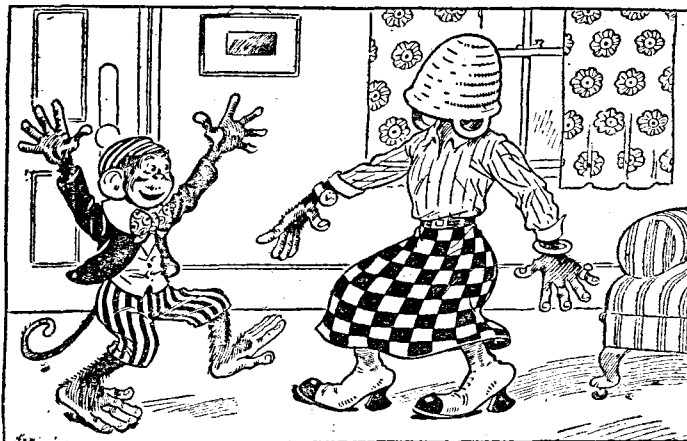
"What's that?" she asked.

"That?" said Jacko wickedly. "A hat."

"A hat!" exclaimed Belinda, taking it up. She held it over her head, and marched to the looking-glass.

Jacko ran behind her, caught hold of the handles, and pulled it tight down over her head.

Belinda screamed, and tugged at it to get it off. But it wouldn't come off. It got caught in her hairpins, and the more she tugged the more firmly it stuck.



Jacko danced round, roaring with laughter; and Belinda got mad.

"Take it off, you horrid little wretch!" she cried.

"It's the nicest hat you ever had," teased Jacko; "it hides your face."

"I'm suffocating! Oh, do take it off—dear Jacko!" implored Belinda.

Just then in came Baby Jacko.

"Oh, Belinda!" he cried, clapping his hands. "You do look funny. Mammie, come and look at Belinda with a basket on her head."

"Basket!" said Mother Jacko, bustling in. "Not my basket, I hope! Yes, it is! You bad girl!" she said, dashing at the helpless Belinda. "How dare you spoil my beautiful basket!" And with a great strong pull she jerked it off.

"You nearly had my head off," wailed Belinda, "and it wasn't me at all; it was that wicked Jacko."

"Jacko?" echoed his mother sharply. "Where is he?"
There wasn't a sign of him!

Adventures of Augustus and Marmaduke

"In Lord Dodnoodle's lake there are some monster fish, I know," Augustus said to Marmaduke, "so fishing we will go."

They took a lot of string and hooks; some worms to serve as bait. "We'll catch the monster pike," said Gus, "and quickly seal his fate."

On each hook a worm was put.

Augustus got a bite;

The monster pike was on his line,

and pulled with all his might.

"Help! help!" he cried; and

Marmaduke with both hands

grasped the line.

(It was the biggest pike afloat;

it weighed just two stone nine.)

"Let go! Let go!" Augustus

cried. But that they could

not do;

The string was twisted round

their legs, and pulled them to

and fro.

Splash! splash! into the water now the boys went, with a shout;

And north and south, and east and west, and also round about,

The boys were pulled; and such a fate boys ne'er before have met.

For all I know it's round and round those lads are skimming yet.



The Charity Boy

A gentleman was walking down the Strand one day rather more than 100 years ago, when he felt something touching his coat. Turning round sharply he seized a small boy who he thought was trying to pick his pocket. "So young and yet so wicked," said he.

"Oh, sir," replied the boy in tears, "you are quite wrong! I fancied I was Leander trying to swim the Hellespont, and as I moved my arms about my hand by chance touched your pocket."

This clever boy was one of a large family, and at five he used to read the Arabian Nights to his brothers. When his father died he was sent to the Bluecoat School, which was not then a very happy place, for the boys were fed badly and flogged well. But he did well at the classics, and used to go about reciting Greek and Latin verses till he came to be known as the "inspired charity boy."

He was a great dreamer, and had all sorts of strange ideas as to what he would be when he grew up. At one time he wanted to be a surgeon, then a shoe-maker, then a preacher. But he went to Cambridge University, where, falling in love and being rejected, he ran away and joined the Dragoons.

One day he was acting as sentinel when he heard two officers discussing Greek poetry, and one quoted some lines which he said were from Euripides.

"Excuse me, sir," said the sentinel to the astonished officer, "but you have quoted the lines incorrectly, and they are not from Euripides but from Sophocles."

Inquiries were made, the soldier's identity was discovered, and he was bought out of the Army by his friends, and returned to Cambridge, where he failed to gain a degree. He married, and tried all sorts of ways of earning a living—journalism, poetry, lecturing, and preaching.

One day he had a dream which gave him an idea for a poem about a boat, a bird, and a bow; and that poem has become famous all over the world, and is in your school books. He wrote many other poems, travelled on the Continent, ran away from Italy, and was chased by a French cruiser because Napoleon wanted to capture him for something he had written.

His remaining years were sad, owing to ill health brought on by bad food at school, and by swimming without undressing and then walking about in his wet clothes. He finally did the most foolish thing of all by taking opium to deaden his pain, and he died three years before Queen Victoria came to the throne. This is his portrait. Who was he?



THE MAN LAST WEEK WAS SAMUEL JOHNSON

The Children's Newspaper grows out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world. The Magazine appears on the 15th of each month, and the Editor's address is: Arthur Mee, Fleetway House, Farringdon St., London, E.C. 4.

CHILDREN'S NEWSPAPER

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AEROPLANE RELEASED BY A CATAPULT. EMPEROR'S WOODEN HORSES



Flower boy in the Coliseum at Rome



A child of six who saved her friend. See story on page 1



The Camp-fire Girls—A new out-of-door movement at King's Langley



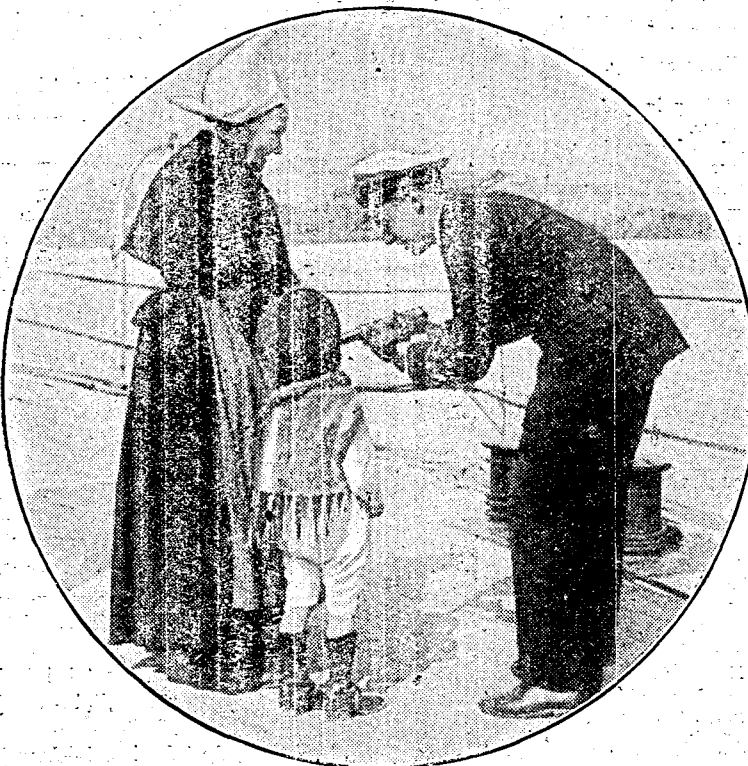
Edith Cavell, who now sleeps by Norwich Cathedral. See page 1



French boy on a British gun



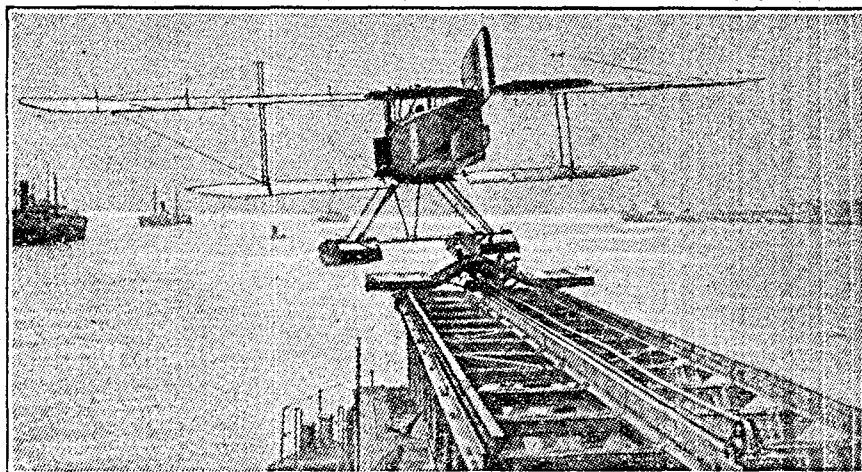
The baby of Downing-st. Prime Minister's granddaughter, who prattled on the telephone to Paris



The people of Cherbourg have been allowed to wander over the British warships there. A French boy is here peeping through a telescope at the fleet



A film player, Beth Ivins, whose ancestor was on William the Conqueror's staff at Hastings



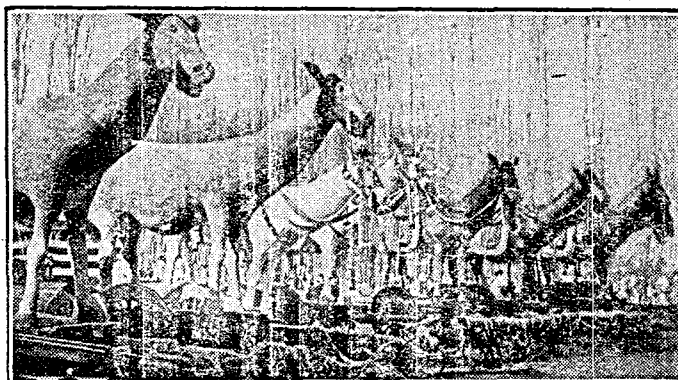
An aeroplane started by a compressed-air catapult—a method employed in cramped spaces. This fine photograph is from the R.A.F. Exhibition in London



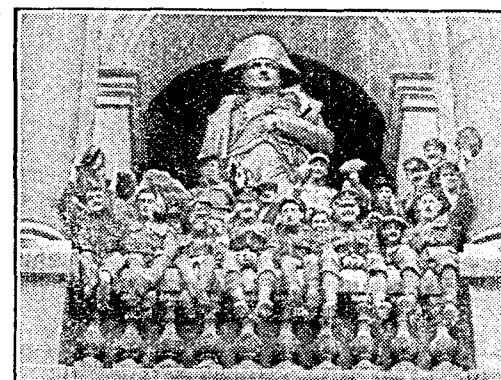
Boys of the greatest race upon the earth—A class in a Chinese school being taught to sing



The little fisherman—Tied to the mast of the ship for safety



The wooden horses at the funeral of a former Emperor of Korea, whose flight to the other world these steeds are supposed to aid



British troops at Napoleon's statue cheering Admiral Beatty as he passed

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